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1985

ALBERTA HOUSE COST COMPARISON STUDY

24 Unit
Walk-up Apartment

Alberta
DEPARTMENT OF HOUSING



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1985 ALBERTA HOUSE COST COMPARISON STUDY

Walk - Up Apartment

NOVEMBER 1985

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TABLE OF CONTENTS

	Page No.
PREFACE.....	1
1.0 INTRODUCTION.....	2
1.1 Objectives.....	3
1.2 Scope of Work.....	3
1.3 Drawings.....	5
1.4 Approach.....	5
2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT.....	7
WA.1 Total Building Costs.....	8
WA.2 Comparative Cost Ratios.....	9
WA.3 Comparative Cost Tables 1984-1985.....	10
WA.4 Comparative Building Cost Bar Chart 1984-1985.....	11
WA.5 Comparative Total Building Costs 1980-1985.....	12
WA.6 Comparative Cost per Square Foot of Gross Floor Area 1980-1985.....	13
WA.7 Comparative Cost per Apartment Unit 1980-1985.....	14
WA.8 Comparative Total Building Cost Graphs 1980-1985.....	15
WA.9 Comparative Cost per Apartment Unit 1980-1985, Inflation Adjusted Dollars.....	16
WA.10 Comparative Apartment Unit Cost Graphs 1980-1985, Inflation Adjusted Dollars..	17
WA.11 Trade Division Cost Summaries.....	18
3.0 COMMENTARY.....	20
3.1 General.....	21
3.2 Highlights by Centre.....	22
4.0 DETAILED COST ESTIMATES BY TRADE DIVISION FOR EACH CENTRE.....	27

APPENDIX

Reduced Drawings: Walk-Up Apartment

PREFACE

The main purpose of the 1985 Alberta House Cost Comparison Study is to provide estimates of the hard construction costs of a prototypical single-detached dwelling and a 24-unit walk-up apartment in nine urban centres in this Province.

The study also compares 1985 residential construction costs with those of previous years in the selected urban centres. Most emphasis is given to a comparison of 1985 with 1984 costs and the study includes an analysis of these differences.

The Alberta Department of Housing has commissioned similar studies for the past seven years. The 1985 study has been carried out by Jubilee Consultants and is documented in three reports:

1985 Alberta House Cost Comparison Study: Executive Summary
1985 Alberta House Cost Comparison Study: Single-Detached Dwelling
1985 Alberta House Cost Comparison Study: Walk-Up Apartment

Additional copies of any of these reports can be ordered from:

ALBERTA DEPARTMENT OF HOUSING
Research and Development Branch
10050 - 112 Street
Edmonton, Alberta
T5K 2J1

1.0 INTRODUCTION

1.0 INTRODUCTION

1.1 Objectives

The objectives of the 1985 Alberta House Cost Comparison Study are as follows:

1. To determine 1985 hard residential construction costs in selected urban centres in Alberta.
2. To determine reasons for differences in residential construction costs in the selected centres.
3. To carry out detailed comparisons of 1985 residential construction costs with 1984 residential construction costs in the selected centres.
4. To determine and comment on residential construction cost trends over the last seven years in the selected centres.

1.2 Scope of Work

The 1985 Alberta House Cost Comparison Study examines the construction costs of a typical single-detached dwelling and a twenty-four unit walk-up apartment building.

The study has been documented in three reports: an Executive Summary, a report on a typical single-detached dwelling and a report on a walk-up apartment. This report deals with the walk-up apartment.

The study examines building construction costs in the following centres:

- | | |
|-------------------|-----------------|
| 1. Edmonton | 6. Hinton |
| 2. Calgary | 7. Lethbridge |
| 3. Red Deer | 8. Medicine Hat |
| 4. Fort McMurray | 9. Lloydminster |
| 5. Grande Prairie | |

1.0 INTRODUCTION

1.2 Scope of Work (continued)

The cost analysis for both the single-detached dwelling and the walk-up apartment examines the building construction cost differences between each of the centres and highlights the reasons for those differences with reference to such factors as:

- a) material costs,
- b) labour costs, and
- c) building features and inclusions.

The cost estimates of the walk-up apartment for each centre include all structural, finishing, mechanical and electrical work as shown on the drawings and included in the specifications, site overhead, and contractors' overhead and profit. The cost estimate excludes the following items:

- a) cost of land and site clearance,
- b) site servicing costs,
- c) site development costs,
- d) design fees and expenses,
- e) legal fees and expenses, and
- f) marketing and real estate financing costs.

1.0 INTRODUCTION

1.3 Drawings

The drawings used in the study for the walk-up apartment include:

- 1) Site plan,
- 2) Foundation plan,
- 3) Basement floor plan,
- 4) Main floor plan,
- 5) Second and third floor plan,
- 6) Building elevations,
- 7) Building elevations,
- 8) Section and details,
- 9) Basement floor plan - Mechanical Layout,
- 10) Main floor plan - Mechanical Layout,
- 11) 2nd & 3rd floor plan - Mechanical Layout,
- 12) Basement floor plan - Electrical Layout,
- 13) Main floor plan - Electrical Layout, and
- 14) 2nd & 3rd floor plan - Electrical Layout.

These drawings are included in the appendix.

1.4 Approach

The building construction costs are detailed in the report under the headings of labour and material/equipment costs. Labour rates used in the report are either those established by the trade union concerned, or by the market where trade union rates do not apply. In most cases, a realistic assessment of labour rates has been established by examining the circumstances of the particular sub-trade within the building industry. Material prices have been evaluated from building materials suppliers' lists. Average discounts are applied in order to establish a realistic market price for the materials to contractors.

1.0 INTRODUCTION

1.4 Approach (continued)

The cost data are assembled by sub-trade and presented in 25 trade categories. The sub-trade operations are combined within each trade category in order to reflect current estimating practice within the industry. Site overhead and general contractor's office overhead and profit are shown separately to indicate the actual site costs.

A computer program was developed in order to collate and present the cost data which were assembled for the nine centres. The quantities and trade descriptions were initially established for the prototypical house and apartment building. The cost data applicable to the relevant quantities and trade descriptions for each centre were then processed by computer.

The cost effects of market forces and building industry conditions are addressed in the 'Commentary' section of this report.

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

TABLE WA. 1 : Total Building Costs

ITEM	EDMONTON		CALGARY		RED DEER		FORT McMURRAY		GRANDE PRAIRIE		HINTON		LETHBRIDGE		MEDICINE HAT		LLOYD- MINSTER	
ELEMENT	TOTAL \$	%	TOTAL \$	%	TOTAL \$	%	TOTAL \$	%	TOTAL \$	%	TOTAL \$	%	TOTAL \$	%	TOTAL \$	%	TOTAL \$	%
Labour	227,892	36.4	225,005	36.5	237,926	36.9	278,792	38.0	256,595	36.9	259,347	37.6	239,414	36.8	246,926	37.7	272,592	38.1
Material	398,082	63.6	392,044	63.5	406,539	63.1	455,628	62.0	438,884	63.1	431,179	62.4	411,729	63.2	408,422	62.3	441,944	61.9
Total 1985	625,974	100.0	617,049	100.0	644,466	100.0	734,420	100.0	695,480	100.0	690,526	100.0	651,143	100.0	655,347	100.0	714,537	100.0
Cost per m2	\$337.09		\$333.28		\$347.05		\$395.49		\$374.52		\$371.85		\$350.64		\$352.91		\$384.78	
Cost per SF	\$31.32		\$30.87		\$32.24		\$36.74		\$34.79		\$34.55		\$32.58		\$32.79		\$35.75	
Total per Apt. 1985	\$26,082		\$25,710		\$26,853		\$30,601		\$28,978		\$28,772		\$27,131		\$27,306		\$29,772	
Total 1984.\$	600,039		591,861		624,342		731,995		694,794		693,688		632,121		652,014		701,901	
Total per Apt. 1984 .\$	25,002		24,661		26,014		30,500		28,950		28,904		26,338		27,167		29,246	
Changes From 1984	4.3%		4.3%		3.2%		0.3%		0.1%		-0.5%		3.0%		0.5%		1.8%	

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

Table WA. 2 : Comparative Cost Ratios *

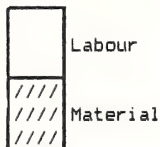
LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD- MINSTER
EDMONTON	1.00	0.99	1.03	1.17	1.11	1.10	1.04	1.05	1.14
CALGARY	1.01	1.00	1.04	1.19	1.13	1.12	1.06	1.06	1.16
RED DEER	0.97	0.96	1.00	1.14	1.08	1.07	1.01	1.02	1.11
FORT McMURRAY	0.85	0.84	0.88	1.00	0.95	0.94	0.89	0.89	0.97
GRANDE PRAIRIE	0.90	0.89	0.93	1.06	1.00	0.99	0.94	0.94	1.03
HINTON	0.91	0.89	0.93	1.06	1.01	1.00	0.94	0.95	1.03
LETHBRIDGE	0.96	0.95	0.99	1.13	1.07	1.06	1.00	1.01	1.10
MEDICINE HAT	0.96	0.94	0.98	1.12	1.06	1.05	0.99	1.00	1.09
LLOYD- MINSTER	0.88	0.86	0.90	1.03	0.97	0.97	0.91	0.92	1.00

* Entries refer to the ratio of the price for a city in the top row of the table divided by a price for the city listed in the column. For example Red Deer costs are 1.03 times Edmonton costs.

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

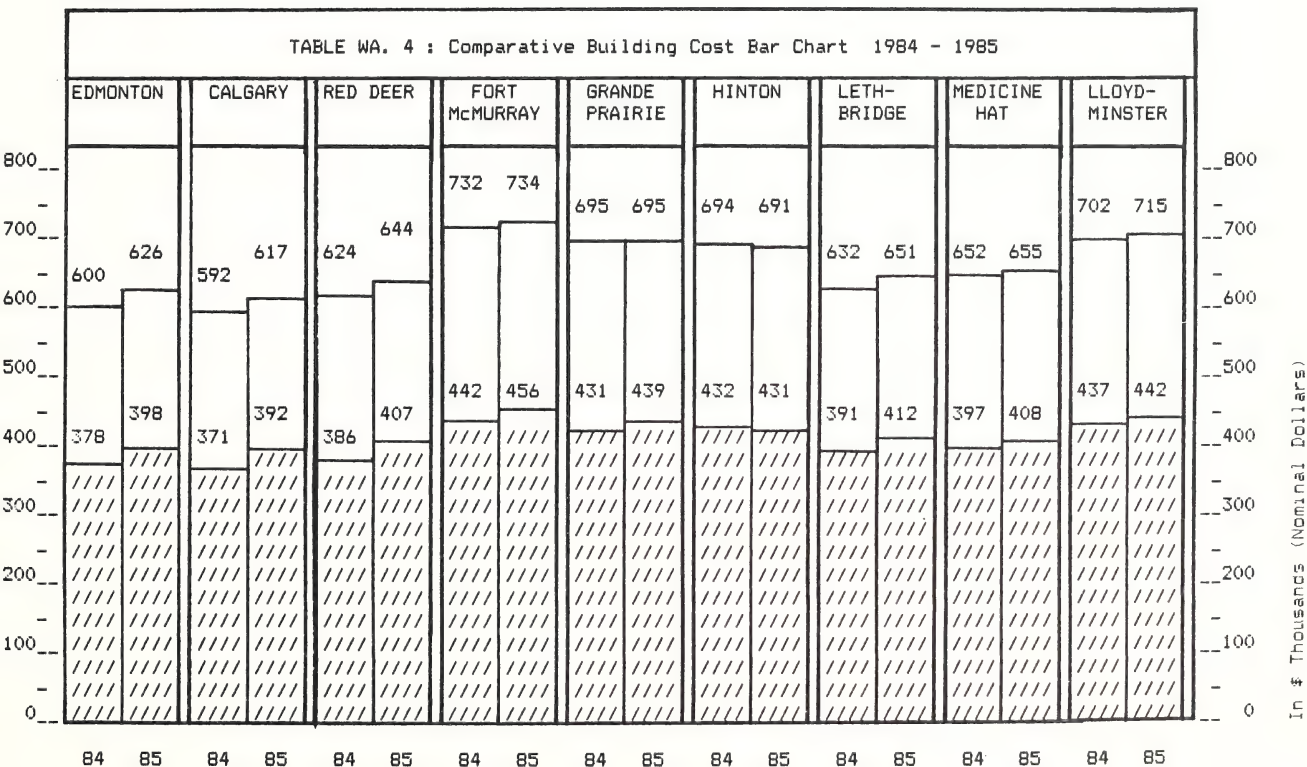
Table WA. 3 : Comparative Cost Table 1984 - 1985

LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD- MINSTER
Labour Cost									
1985	\$227,892	\$225,005	\$237,926	\$278,792	\$256,595	\$259,347	\$239,414	\$246,926	\$272,592
1984	\$221,594	\$221,078	\$238,509	\$289,846	\$264,057	\$261,210	\$241,448	\$254,540	\$265,174
Difference	\$6,298	\$3,927	(\$583)	(\$11,054)	(\$7,462)	(\$1,863)	(\$2,034)	(\$7,614)	\$7,418
% Difference	2.8%	1.8%	-0.2%	-3.8%	-2.8%	-0.7%	-0.8%	-3.0%	2.8%
Mat'l Cost									
1985	\$398,082	\$392,044	\$406,539	\$455,628	\$438,884	\$431,179	\$411,729	\$408,422	\$441,944
1984	\$378,445	\$370,783	\$385,833	\$442,149	\$430,737	\$432,478	\$390,673	\$397,474	\$436,727
Difference	\$19,637	\$21,261	\$20,706	\$13,479	\$8,147	(\$1,299)	\$21,056	\$10,948	\$5,217
% Difference	5.2%	5.7%	5.4%	3.0%	1.9%	-0.3%	5.4%	2.8%	1.2%
Total Cost									
1985	\$625,974	\$617,049	\$644,466	\$734,420	\$695,480	\$690,526	\$651,143	\$655,347	\$714,537
1984	\$600,039	\$591,861	\$624,342	\$731,995	\$694,794	\$693,688	\$632,121	\$652,014	\$701,901
Difference	\$25,935	\$25,188	\$20,124	\$2,425	\$686	(\$3,162)	\$19,022	\$3,333	\$12,636
% Difference	4.3%	4.3%	3.2%	0.3%	0.1%	-0.5%	3.0%	0.5%	1.8%



2.0 SUMMARY OF FINDINGS FOR THE WALK - UP APARTMENT

TABLE WA. 4 : Comparative Building Cost Bar Chart 1984 - 1985



2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

Table WA. 5 : Comparative Total Building Costs 1980 - 1985 *

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	** HINTON	LETHBRIDGE	MEDICINE HAT	*** LLOYD- MINSTER
1980	\$709,337	\$660,295	\$670,183	\$685,282	\$811,898	\$736,435	-	\$703,808	\$697,459	-
1981	\$756,703	\$714,492	\$719,003	\$733,211	\$861,728	\$784,409	-	\$740,084	\$743,992	-
1982	\$712,232	\$665,273	\$627,844	\$710,485	\$805,134	\$700,436	\$744,686	\$720,280	\$723,716	-
1983	\$644,459	\$603,046	\$592,174	\$623,852	\$712,262	\$669,574	\$674,046	\$632,872	\$647,845	-
1984	\$658,084	\$600,039	\$591,861	\$624,342	\$731,995	\$694,794	\$693,688	\$632,121	\$652,014	\$701,901
1985	\$669,882	\$625,974	\$617,049	\$644,466	\$734,420	\$695,480	\$690,526	\$651,143	\$655,347	\$714,537

NOTES : * Expressed in nominal dollars
 ** Hinton was not included in the 1980 and 1981 studies
 *** Lloydminster was not included in the 1980 through 1983 studies

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

Table WA. 6 : Comparative Cost per Square Foot of Gross Floor Area 1980 - 1985 *

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	** HINTON	LETHBRIDGE	MEDICINE HAT	*** LLOYD- MINSTER
1980	\$35.48	\$33.04	\$33.52	\$34.28	\$40.61	\$36.84	-	\$35.20	\$34.89	-
1981	\$37.86	\$35.75	\$35.97	\$36.68	\$43.11	\$39.24	-	\$37.03	\$37.22	-
1982	\$35.63	\$33.28	\$31.41	\$35.54	\$40.28	\$35.04	\$37.26	\$36.03	\$36.21	-
1983	\$32.24	\$30.17	\$29.63	\$31.21	\$35.63	\$33.50	\$33.72	\$31.66	\$32.41	-
1984	\$32.92	\$30.02	\$29.61	\$31.23	\$36.62	\$34.76	\$34.70	\$31.62	\$32.62	\$35.11
1985	\$33.51	\$31.32	\$30.87	\$32.24	\$36.74	\$34.79	\$34.55	\$32.58	\$32.79	\$35.75

NOTES : * Expressed in nominal dollars
 ** Hinton was not included in the 1980 and 1981 studies
 *** Lloydminster was not included in the 1980 through 1983 studies

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

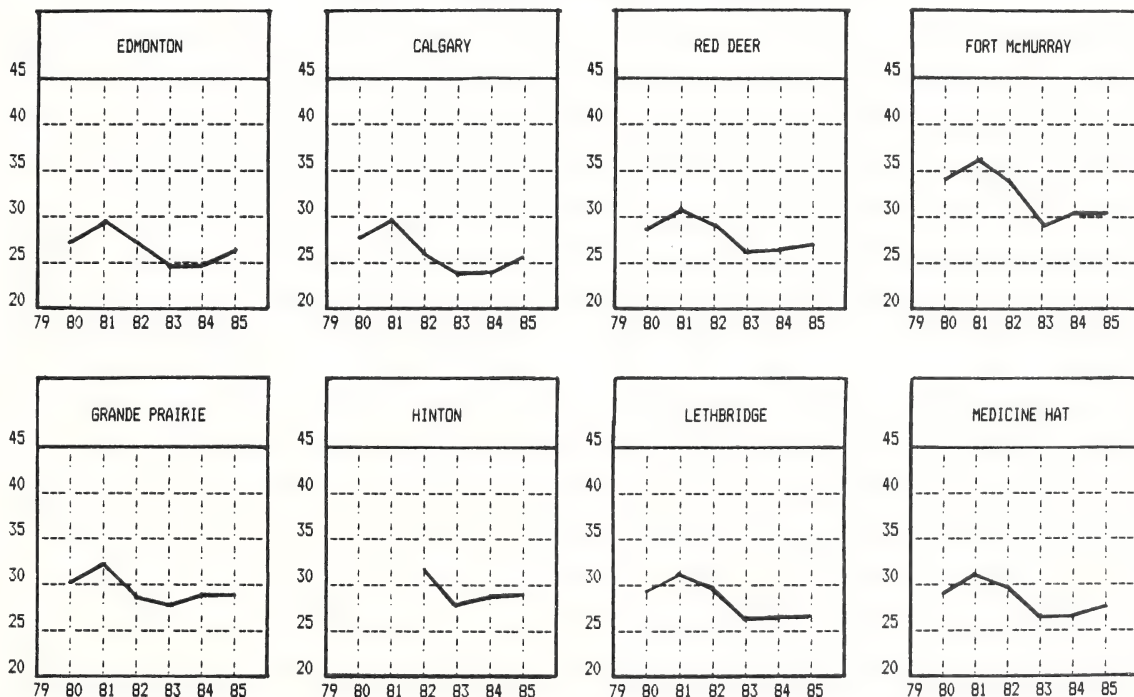
Table WA. 7 : Comparative Cost per Apartment Unit 1980 - 1985 *

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	** HINTON	LETHBRIDGE	MEDICINE HAT	*** LLOYD- MINSTER
1980	\$29,555	\$27,512	\$27,924	\$28,553	\$33,829	\$30,684	-	\$29,325	\$29,061	-
1981	\$31,529	\$29,771	\$29,958	\$30,550	\$35,905	\$32,684	-	\$30,837	\$31,000	-
1982	\$29,677	\$27,720	\$26,160	\$29,604	\$33,547	\$29,185	\$31,029	\$30,012	\$30,155	-
1983	\$26,853	\$25,127	\$24,674	\$25,994	\$29,678	\$27,899	\$28,085	\$26,370	\$26,994	-
1984	\$27,420	\$25,002	\$24,661	\$26,014	\$30,500	\$28,950	\$28,904	\$26,338	\$27,167	\$29,246
1985	\$27,912	\$26,082	\$25,710	\$26,853	\$30,601	\$28,978	\$28,772	\$27,131	\$27,306	\$29,772

NOTES : * Expressed in nominal dollars
 ** Hinton was not included in the 1980 and 1981 studies
 *** Lloydminster was not included in the 1980 through 1983 studies

2.0 SUMMARY OF FINDINGS FOR THE WALK - UP APARTMENT

TABLE WA. 8 : Comparative Apartment Unit Cost Graphs 1980 - 1985



In \$ Thousands (Nominal Dollars)

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

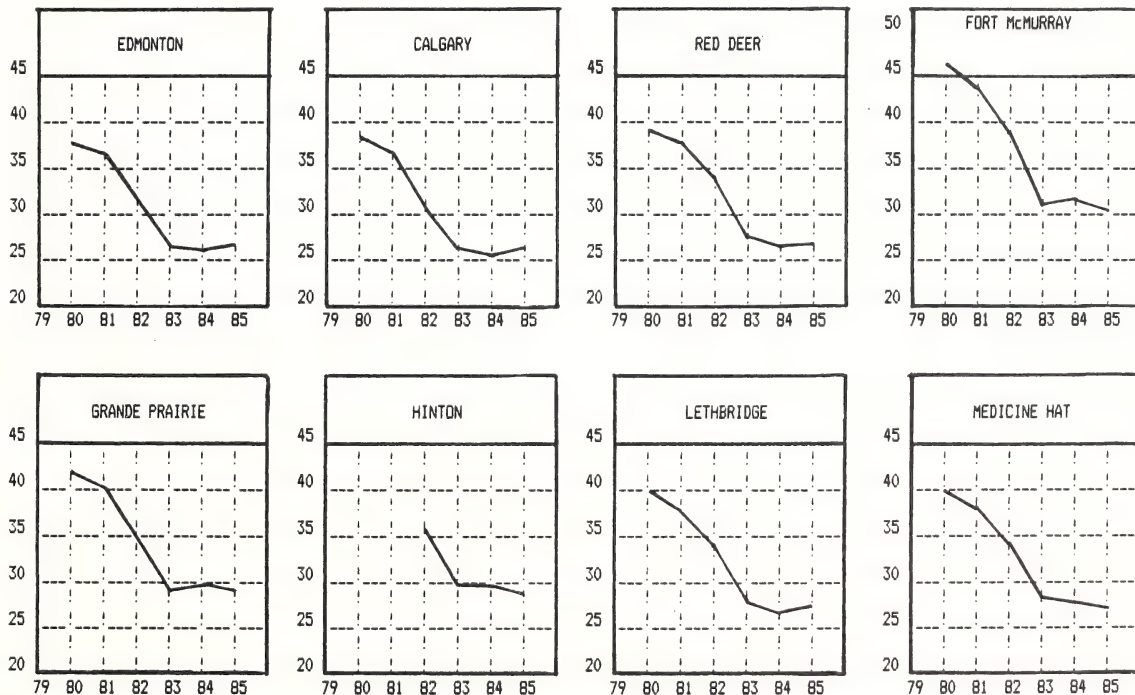
Table WA. 9 : Comparative Cost per Apartment Unit 1980 - 1985, Inflation Adjusted Dollars *

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	** HINTON	LETHBRIDGE	MEDICINE HAT	*** LLOYD- MINSTER
1980	\$40,202	\$37,423	\$37,983	\$38,839	\$46,015	\$41,738	-	\$39,889	\$39,530	-
1981	\$38,755	\$36,594	\$36,824	\$37,551	\$44,134	\$40,174	-	\$37,904	\$38,104	-
1982	\$34,256	\$31,997	\$30,196	\$34,172	\$38,723	\$33,688	\$35,816	\$34,643	\$34,808	-
1983	\$28,219	\$26,405	\$25,929	\$27,316	\$31,188	\$29,318	\$29,514	\$27,711	\$28,367	-
1984	\$28,150	\$25,667	\$25,317	\$26,706	\$31,312	\$29,720	\$29,673	\$27,039	\$27,890	\$30,024
1985	\$27,912	\$26,082	\$25,710	\$26,853	\$30,601	\$28,978	\$28,772	\$27,131	\$27,306	\$29,772

- NOTES :
- * 1. Expressed in 1985 Inflation adjusted dollars
 - 2. Inflation adjustments have been based on the Residential Building Construction Input Price Index for the Prairie Provinces as published by Statistics Canada
 - ** Hinton was not included in the 1980 and 1981 studies
 - *** Lloydminster was not included in 1980 through 1983 studies

2.0 SUMMARY OF FINDINGS FOR THE WALK - UP APARTMENT

TABLE WA. 10 : Comparative Apartment Unit Cost Graphs 1980 - 1985 -Inflation Adjusted Dollars



In \$ Thousands (1985 Inflation Adjusted Dollars)

2.0 SUMMARY OF FINDINGS FOR THE WALK - UP APARTMENTS

Table WA.11 : Trade Division Cost Summaries

LOCATION	EDMONTON	CALGARY	RED DEER	FORT MCMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD- MINSTER
Divisions									
1. Excavation	2,408	3,377	2,546	3,706	3,209	2,718	3,474	2,927	3,472
2. Concrete	15,767	16,777	17,096	22,130	21,184	20,150	15,909	16,966	19,516
3. Damproofing	656	629	796	1,135	1,071	876	881	780	809
4. Siding	13,032	12,815	13,106	17,800	16,980	16,842	15,211	15,542	17,310
5. Roofing	21,826	22,584	23,133	30,784	24,966	24,910	22,812	22,812	25,575
6. Carpentry - Rough	108,044	104,905	106,744	129,875	115,383	110,514	109,397	111,062	113,560
7. Carpentry - Finish	7,137	7,366	7,127	8,047	7,530	7,583	7,307	7,521	7,591
8. Windows and Glazing	23,312	22,088	24,573	28,910	25,194	24,933	24,969	24,969	25,101
9. Sealants	763	763	763	844	818	796	775	775	799
10. Doors	35,621	33,925	35,661	38,943	40,171	39,966	38,292	37,130	39,824
11. Hardware	3,050	3,050	3,050	3,299	3,293	3,158	3,110	3,103	3,198
12. Ceramic Tiling	4,953	4,816	5,090	5,976	5,839	5,602	5,699	5,836	7,124
SUB - TOTAL	\$236,569	\$233,095	\$239,685	\$291,449	\$265,638	\$258,048	\$247,836	\$249,423	\$263,879

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENTS

Table WA.11 : Trade Division Cost Summaries (cont'd)

LOCATION	EDMONTON	CALGARY	RED DEER	FORT MCMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD- MINSTER
Divisions									
13. Wallboard	47,550	45,822	47,931	59,506	53,022	53,905	49,673	48,370	60,018
14. Flooring	41,852	41,092	44,370	50,017	45,460	45,695	44,294	44,327	45,404
15. Painting	18,296	17,627	19,774	22,226	20,795	22,004	21,534	22,183	22,038
16. Fitting	37,429	37,389	37,624	44,116	41,776	38,823	41,351	41,349	42,723
17. Specialties	15,370	15,370	15,370	17,647	17,077	16,458	16,009	16,009	16,531
18. Appliances	27,886	27,886	27,912	29,644	29,568	28,840	28,534	28,510	28,816
19. Plumbing	52,656	50,256	53,448	54,480	53,880	56,520	52,848	53,496	55,656
20. Heating	28,776	27,864	30,048	35,664	35,880	36,192	26,736	28,584	38,304
21. Ventilation	6,768	6,840	6,816	8,520	8,520	8,520	7,848	7,848	8,520
22. Fire Protection	1,944	1,944	1,944	2,472	2,472	2,472	1,944	1,944	2,472
23. Electrical	38,880	39,864	47,544	46,680	49,392	51,048	40,536	41,304	58,176
24. Site Overhead	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
Subtotals - 1-24	\$601,974	\$593,049	\$620,466	\$710,420	\$671,480	\$666,526	\$627,143	\$631,347	\$690,537
25. Gnrl. Contr's Ovhd.& Profit	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
TOTAL	\$625,974	\$617,049	\$644,466	\$734,420	\$695,480	\$690,526	\$651,143	\$655,347	\$714,537

3.0 COMMENTARY

3.0 COMMENTARY

3.1 General

No significant changes were observed as a result of building practice changes, non-availability of materials or changes in standard materials used by the majority of builders.

Due to the increased economic activity in Alberta the construction prices for new residential construction are increasing. This is due to decreasing unemployment, decreasing vacancy rates, decreasing number of foreclosures and lower interest rates as compared with last year. It also appears that the out migration of the recession years has slowed.

Cost increases for apartment construction were greatest in Edmonton, Calgary and Red Deer at 4.3% and 3.2% respectively. The average increase for apartment construction in other centres is 0.9%. Over the last two years the cost increases in Edmonton, Calgary, Red Deer, Fort McMurray Grande Prairie and Hinton have averaged 3.4%. Medicine Hat and Lethbridge experienced much smaller increases over the same period.

The graphic presentation of apartment construction costs in Table WA.8 indicates that average costs have fallen to less than 1980 costs expressed in nominal dollars (i.e., from \$29,555 in 1980 to \$27,912 in 1985, or 5.6%. Expressed in inflation adjusted 1985 dollars, the total average costs are 30.6% less than the 1980 costs (i.e., from \$40,202 in 1980 to \$27,912 in 1985).

Labour costs for apartment construction decreased in all centres except in Edmonton, Calgary and Lloydminster.

3.0 COMMENTARY

3.1 General (continued)

Material prices for apartment construction increased in all centres except in Hinton, where prices decreased very slightly (0.3%). Lumber and construction prices are notable. Compared with the same time last year, lumber prices are substantially higher. Concrete prices increased as well, mainly due to the introduction of a Federal Sales Tax of 6% on concrete. This tax also applies to concrete products. Concrete prices vary considerably from centre to centre, due to demand, location and availability of aggregates and cement. In 1985, prices for 25 MPa concrete for apartments varied from \$77.66/m³ in Lethbridge to \$130.02/m³ in Fort McMurray. Other materials such as windows, roof trusses, lumber, insulation etc., have increased substantially in cost partly due to increase in price and partly as a result of the increase or new applicable federal sales tax.

3.2 Highlights by Centre

Edmonton: The 1985 cost of the typical walk-up apartment in Edmonton is 1% higher than its Calgary counterpart and 4.3% higher than the 1984 Edmonton cost. Expressed in nominal dollars, the total cost is 5.2% less than the 1980 cost. Expressed in inflation adjusted 1985 dollars, the total cost is 30.3% less than the 1980 cost. The overall increase in labour and material prices was 2.8% and 5.2% respectively since 1984.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Calgary: The 1985 cost of the typical walk-up apartment in Calgary is 1% lower than its Edmonton counterpart and 4.3% higher than the 1984 Calgary cost. Expressed in nominal dollars, the total cost is 7.9% less than the 1980 cost. Expressed in inflation adjusted 1985 dollars, the total cost is 32.3% less than the 1980 cost. The overall increase in labour and material prices was 1.8% and 5.7% respectively since 1984.

Red Deer: The 1985 cost of the typical walk-up apartment in Red Deer is higher by 4% and 3% than in Calgary and Edmonton respectively. The cost is 3.2% higher than the 1984 Red Deer cost. Expressed in nominal dollars, the total cost is 6.0% less than the 1980 cost. Expressed in inflation adjusted 1985 dollars, the total cost is 30.8% less than the 1980 cost. The overall decrease in labour cost was 0.2% and the increase in material prices was 5.4% since 1984.

Most basic materials, such as lumber, insulation, drywall, doors, etc., are available in Red Deer at prices close to those in Edmonton.

Fort McMurray: The 1985 cost of the typical walk-up apartment in Fort McMurray is 17% higher than in Edmonton, and 0.3% higher than the 1984 Fort McMurray cost. Expressed in nominal dollars, the total cost is 9.5% less than the 1980 cost.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Fort McMurray: (cont'd): Expressed in inflation adjusted 1985 dollars, the cost is 33.5% less than the 1980 cost. The overall decrease in labour cost was 3.8% and the increase in materials prices was 3.0% since 1984.

Groundwork trade prices, such as excavation and basement wall construction, are higher than the Edmonton rates because of the more northerly location of Fort McMurray and the prolonged winter period. Concrete prices in Fort McMurray are 61% higher than those in Edmonton. Winter construction incurs cost penalties for concrete heating and temporary heating associated with construction.

Grande Prairie: The 1985 cost of the typical walk-up apartment in Grande Prairie is 11% higher than in Edmonton, and 0.1% higher than the 1984 Grande Prairie cost. Expressed in nominal dollars the total cost is 5.6% less than the 1980 cost. Expressed in inflation adjusted 1985 dollars, the total cost is 30.6% less than the 1980 cost. The overall decrease in labour cost was 2.8% and the increase in the material prices was 1.9% since 1984.

While larger discounts on most materials are available if purchased in Edmonton, these discounts are, generally, offset by higher transportation costs to Grande Prairie. Concrete prices in Grande Prairie are 53% higher than those in Edmonton.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Hinton: The 1985 cost of the typical walk-up apartment in Hinton is 10% higher than in Edmonton and 0.5% lower than the 1984 Hinton cost. Expressed in nominal dollars, the total cost is 7.3% less than the 1982* cost. Expressed in inflation adjusted 1985 dollars, the total cost is 19.7% less than the 1982* cost. The overall decrease in labour and material prices was 0.7% and 0.3% respectively since 1984.

Of the nine centres examined, Hinton is the smallest. Apart from the premiums on materials, skilled labour is not as readily available as elsewhere. Therefore, it is necessary to pay certain skilled trades, such as mechanical and electrical, subsistence in the form of accommodation and travel allowances.

Lethbridge: The 1985 cost of the typical walk-up apartment in Lethbridge is 4% higher than in Edmonton, and 3.0% higher than the 1984 Lethbridge cost. Expressed in nominal dollars, the total cost is 7.5% less than the 1980 cost. Expressed in inflation adjusted 1985 dollars, the total cost is 32.0% less than the 1980 cost. The overall decrease in labour cost was 0.8% and the increase for material prices was 5.4% since 1984.

* 1982 has been selected as the base year as Hinton was not part of earlier studies.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Medicine Hat: The 1985 cost of the typical walk-up apartment in Medicine Hat is 5% higher than in Edmonton, and 0.5% higher than the 1984 Medicine Hat cost. Expressed in nominal dollars, the total cost is 6.0% less than the 1980 cost. Expressed in inflation adjusted 1985 dollars, the total cost is 30.9% less than the 1980 cost. The overall decrease in labour cost was 3.0% and the increase in material prices was 2.8% since 1984.

Lloydminster: The 1985 cost of the typical walk-up apartment in Lloydminster is 14% higher than in Edmonton. This year is the second year for Lloydminster to be included in the Alberta House Cost Comparison Study. Expressed in nominal dollars, the total cost is 1.8% higher than the 1984* cost. The overall increase in labour and material prices was 2.8% and 1.2% respectively since 1984.

* 1984 has been selected as the base year as Lloydminster was not part of earlier studies.

4.0 DETAILED COST ESTIMATES BY TRADE DIVISION FOR EACH CENTRE

DETAILED COST ESTIMATES FOR EDMONTON

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
1:EXCAVATION								
1.10 Excavate for basement, wall footings and bases	891	m3	0.42	374	0.80	713	1.22	1,087
1.20 Backfill to basement walls, footings and bases	188	m3	0.38	71	0.72	135	1.10	207
1.30 150 mm gravel or sand bed under slab on grade	70	m3	2.90	203	6.00	420	8.90	623
1.40 Vapour barrier .152 mm polyethylene on gravel or sand bed	501	m2	0.77	386	0.21	105	0.98	491
SUBTOTAL/EXCAVATION	1.30	/M2 GFA		1,034		1,373		2,408
2:CONCRETE								
2.10 Concrete (25 MPa) in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced conc. footing	58	m3	0.00	0	81.00	4,698	81.00	4,698
2.20 Reinforcing steel in footings and basement walls (material only)	1,652	kg	0.00	0	0.59	975	0.59	975
2.30 Form, place rebar and pour concrete in footing (560 x 250 mm) (subcontract)	222	m	5.00	1,110	1.59	353	6.59	1,463

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
2.35 Form, place rebar and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	14.40	1,382	4.98	478	19.38	1,860
2.40 90 mm concrete (20 MPa) in slab on grade	456	m2	3.30	1,505	6.76	3,083	10.06	4,587
2.45 150 x 150 mm welded wire mesh reinforcement to slab on grade (material only)	456	m2	0.00	0	2.82	1,286	2.82	1,286
2.55 38 mm thick rigid insulation to concrete wall (basement)	117	m2	1.90	222	3.30	386	5.20	608
2.60 Parging to concrete walls	29	m2	7.75	225	2.21	64	9.96	289
SUBTOTAL/CONCRETE	8.49	/M2 GFA		4,444		11,322		15,767
3:DAMPPOOFING								
3.10 Two coats asphaltic emulsion on concrete walls	159	m2	0.25	40	0.25	40	0.50	80
3.20 100 mm perforated plastic weeping tile in crushed gravel surround	96	m	2.50	240	3.50	336	6.00	576
SUBTOTAL/DAMPPOOFING	0.35	/M2 GFA		280		376		656
4:SIDING								
4.10 Prefinished aluminum siding	98	m2	4.40	431	12.00	1,176	16.40	1,607

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
4.40 Stained dark-brown cedar siding 25 x 150 mm channel to column	700	FBM	0.66	462	0.95	665	1.61	1,127
4.50 Stucco on wire mesh on building paper	678	m2	9.40	6,373	4.69	3,180	14.09	9,553
4.60 24 ga. aluminum vented metal soffit c/w edge moulding	59	m2	4.05	239	8.58	506	12.63	745
SUBTOTAL/SIDING	7.02	/M2 GFA		7,505		5,527		13,032
5:ROOFING/SHEET METAL								
5.10 Built-up asphalt roofing completed with mineral granular and flashing	527	m2	18.50	9,750	15.00	7,905	33.50	17,655
5.30 R.S.I. 6 (R34) batt insulation in joist space	527	m2	1.52	801	6.01	3,167	7.53	3,968
5.40 .102 mm polyethylene vapour barrier	580	m2	0.24	139	0.11	64	0.35	203
SUBTOTAL/ROOFING/SHEET METAL	11.75	/M2 GFA		10,690		11,136		21,826
6:CARPENTRY - ROUGH								
6.10 Material only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (2-38 x 235 mm) - spruce	38	MFBM	0.00	0	632.00	24,016	632.00	24,016

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

				LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM	COST	UNIT RATE	ITEM COST	UNIT RATE	COST
6.20 Material only	44	MFBM	0.00		0	471.00	20,724	471.00	20,724
No. 2 grade fir or spruce as below									
framing (38 x 140 mm) - fir									
plate (38 x 140 mm) - fir									
cross bridging (38 x 38 mm) - spruce									
framing (38 x 89 mm) - spruce									
framing (38 x 140 mm) - spruce									
blocking (38 x 89 mm) - spruce									
blocking (38 x 140 mm) - spruce									
wall strapping (38 x 38 mm) - spruce									
fascia (19 x 140 mm) - spruce									
6.30 Material only - Sheathing	4,051	m2	0.00		0	6.17	24,995	6.17	24,995
19 mm plywood - floor underlay	1432	m2							
13 mm tentest - u/s of joist	1368	m2							
10 mm plywood - roof sheathing	524	m2							
8 mm plywood - wall sheathing	727	m2							
6.40 Labour only - complete framing	1,857	m2	20.58	38,217		0.00	0	20.58	38,217
including installation of windows									
6.50 90 x 238 mm wide R.S.I. 2.1 (R12)	99	m	0.39	39		0.54	53	0.93	92
batt insulation (vertical eaves)									
SUBTOTAL/CARPENTRY - ROUGH	58.18	/M2 GFA		38,256			69,788		108,044

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
7:CARPENTRY - FINISH								
7.10 Stair - 6 flights @ (2x6x7 = 84 risers) 38 x 300 mm stringers - 59 m 38 x 235 mm treads - 103 m 6 x 275 mm fir plywood in risers - 105 m	2	No	465.00	930	303.00	606	768.00	1,536
7.30 Select grade fir in window and door trim, base; 40 x 12 mm - window 431 m - door 555 m - base 2328 m = TOTAL 3314 m	3,314	m	0.68	2,254	1.01	3,347	1.69	5,601
SUBTOTAL/CARPENTRY - FINISH	3.84	/M2 GFA		3,184		3,953		7,137
8:WINDOWS AND GLAZING								
8.10 Double-glazed patio door in wood frame with aluminum cladding, (size 2.4 x 1.8 m), including hardware	18	No	0.00	0	787.00	14,166	787.00	14,166
8.20 Double-glazed sealed window in steel frame, with wired glass (size 2.4 x 2.55 m)	4	No	0.00	0	792.00	3,168	792.00	3,168

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
8.30 Double-glazed sliding units in wood frame (size 2.4 x .9 m), aluminum sliders, screen, incl. hardware	6	No	0.00	0	225.00	1,350	225.00	1,350
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m), aluminum sliders, screen, incl. hardware	28	No	0.00	0	152.00	4,256	152.00	4,256
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m), aluminum sliders, screen, incl. hardware	3	No	0.00	0	124.00	372	124.00	372
SUBTOTAL/WINDOWS AND GLAZING	12.55	/M2 GFA		0		23,312		23,312
9:SEALANTS								
9.10 Caulk - exterior (exterior doors, windows, junction of siding and concrete)	725	m	0.36	261	0.22	160	0.58	421
9.20 Caulk - interior (ceramic tile)	227	m	0.98	222	0.53	120	1.51	343
SUBTOTAL/SEALANTS	0.41	/M2 GFA		483		280		763
10:DOORS								
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold	3	No	220.00	660	1,402.00	4,206	1,622.00	4,866

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
10.06 Fire Rated door and side light with 0.9 x 0.21 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8	No	175.00	1,400	1,046.00	8,368	1,221.00	9,768
10.09 Solid core door and frame, rotary cut mahogany - 25 No. .9x2.1mx44mm (20 min label) - 26 No. .85 x 2.1 m x 44 mm = 51 No. TOTAL	51	No	20.00	1,020	160.00	8,160	180.00	9,180
10.20 Hollow core door and frame rotary cut mahogany face - 24 No. .7 x 2. m x 35 mm - 24 No. .75 x 2. m x 35 mm = 48 No. TOTAL	48	No	11.00	528	33.99	1,632	44.99	2,160
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1	No.	20.00	20	189.00	189	209.00	209

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.30 Metal Folding Bi-fold doors, with tracks and pulls	78	No.	11.00	858	110.00	8,580	121.00	9,438
- 28 No. 1.8 x 2. m								
- 14 No. 1.5 x 2. m								
- 6 No. 1.2 x 2. m								
- 14 No. .9 x 2. m								
- 16 No. .6 x 2. m								
= 78 No. TOTAL								
SUBTOTAL/DOORS	19.18	/M2 GFA		4,486		31,135		35,621
11:HARDWARE								
11.15 Lock sets to interior doors	25	set	10.00	250	21.99	550	31.99	800
11.25 Butts to interior doors (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets	81	set	7.00	567	9.99	809	16.99	1,376
11.40 Bathroom privacy latch sets	24	set	7.00	168	11.99	288	18.99	456
11.50 Door closers (rated)	11	No	12.00	132	26.00	286	38.00	418
SUBTOTAL/HARDWARE	1.64	/M2 GFA		1,117		1,933		3,050
12:CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm, thinset on drywall	137	m2	20.00	2,740	16.15	2,213	36.15	4,953
SUBTOTAL/CERAMIC TILING	2.67	/M2 GFA		2,740		2,213		4,953

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
13:WALLBOARD								
13.10 Gypsum wallboard, taped and sanded 13 mm standard on walls	3,945	m2	2.25	8,876	1.68	6,628	3.93	15,504
13.13 Gypsum wallboard, taped and sanded 13 mm fire retardant - walls 666 m2 - stair soffit 29 m2 = TOTAL 695 m2	695	m2	2.48	1,724	2.12	1,473	4.60	3,197
13.14 Gypsum wallboard, taped and sanded 15.9 mm thick	487	m2	2.48	1,208	2.61	1,271	5.09	2,479
13.15 Gypsum wallboard, taped and sanded 15.9 fire retardant shaft enclosure	63	m2	4.48	282	2.81	177	7.29	459
13.16 Gypsum wallboard, taped and sanded 15.9 mm fire retardant with sound bar on ceiling	1,887	m2	3.48	6,567	3.01	5,680	6.49	12,247
13.17 2 layers gypsum wallboard, taped and sanded, 15.9 mm fire retardant with sound bar on ceiling	4	m2	5.11	20	6.08	24	11.19	45
13.30 Tentest board, Crane 3-183 Redcliffe	524	m2	3.70	1,939	2.29	1,200	5.99	3,139
13.40 Finish to ceilings - textured	1,425	m2	0.97	1,382	0.98	1,397	1.95	2,779

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
13.70 Vapour barrier, .102 mm polyethylene	1,346	m2	0.24	323	0.11	148	0.35	471
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls	728	m2	0.76	553	3.66	2,664	4.42	3,218
13.86 Batt insulation RSI - 3.5 (R20) to interior walls	908	m2	0.76	690	3.66	3,323	4.42	4,013
SUBTOTAL/WALLBOARD	25.61	/M2 GFA		23,565		23,986		47,550
14:FLOORING								
14.10 Sheet vinyl flooring. .065 gauge with adhesive to subfloor	364	m2	5.00	1,820	10.50	3,822	15.50	5,642
14.20 Carpet, 20 oz. 100% Nylon 13 mm thick chip foam underlay	1,296	m2	3.00	3,888	12.60	16,330	15.60	20,218
14.30 'Neoprene Hypalon' waterproofing or equal to balcony	67	m2	15.00	1,005	20.00	1,340	35.00	2,345
14.40 Gypcrete floor topping including steel trowel finish	1,338	m2	6.70	8,965	3.50	4,683	10.20	13,648
SUBTOTAL/FLOORING	22.54	/M2 GFA		15,678		26,175		41,852
15:PAINTING								
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy	26	m2	3.85	100	1.10	29	4.95	129

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
15.14 Prepare, prime, two coats enamel on metal railing and balustrade	783	m	1.34	1,049	0.85	666	2.19	1,715
15.22 Interior work - Prepare, 1 coat primer sealer, 1 coat latex or semigloss paint on drywall - walls 4962 m2 - ceiling 234 m2 = TOTAL 5196 m2	5,196	m2	1.68	8,729	0.61	3,170	2.29	11,899
15.30 Two coats urethane varnish on doors and frames	105	No	19.00	1,995	5.50	578	24.50	2,573
15.40 Prepare, prime, one coat semigloss on base	2,328	m	0.63	1,467	0.12	279	0.75	1,746
15.50 Prepare, prime, one coat semigloss on shelving	94	m2	2.10	197	0.40	38	2.50	235
SUBTOTAL/PAINTING	9.85	/M2 GFA		13,538		4,758		18,296
16:FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	3.20	342	3.99	427	7.19	769

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
16.20 Vanity and cabinets, plastic laminated top to lower cabinets, drawers, shelves etc.	195	m	26.00	5,070	162.00	31,590	188.00	36,660
- Lower vanity and cupboard	27	m						
- Wall units	99	m						
- Worktop unit	69	m						
= TOTAL	195	m						
SUBTOTAL/FITTINGS	20.16	/M2 GFA		5,412		32,017		37,429
17:SPECIALTIES								
17.10 Washroom accessories	96	No	4.50	432	8.00	768	12.50	1,200
- 24 No. toilet paper holders								
- 24 No. soap dishes								
- 48 No. towel bars								
= 96 No. TOTAL								
17.20 Medicine cabinet	24	No	9.00	216	33.00	792	42.00	1,008
17.30 25 mm dia. shower curtain rod, chrome	24	No	5.00	120	6.00	144	11.00	264
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts	1	set	55.00	55	355.00	355	410.00	410
17.50 Coat rods, chrome, 18 mm dia.	24	No	3.00	72	5.00	120	8.00	192
17.60 Drapery tracks	102	m	3.00	306	8.00	816	11.00	1,122

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
17.70 970 mm high metal railing c/w balusters 100 mm o.c. max to balconies	98	m	10.00	980	39.00	3,822	49.00	4,802
17.80 Metal railing and balusters with vinyl cap	66	m	10.00	660	35.00	2,310	45.00	2,970
17.90 Handrail: 50 mm dia. pipe & brackets	54	m	22.00	1,188	41.00	2,214	63.00	3,402
SUBTOTAL/SPECIALTIES	8.28	/M2 GFA		4,029		11,341		15,370
18:APPLIANCES								
18.10 Range, freestanding, 760 mm (30") top 4 surface elements, oven auto timer	24	No	15.00	360	474.00	11,376	489.00	11,736
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24	No	15.00	360	448.00	10,752	463.00	11,112
18.30 Range hood	24	No	15.00	360	86.00	2,064	101.00	2,424
18.40 Coin operated dryer	2	No	15.00	30	556.00	1,112	571.00	1,142
18.50 Coin operated washer	2	No	15.00	30	721.00	1,442	736.00	1,472
SUBTOTAL/APPLIANCES	15.02	/M2 GFA		1,140		26,746		27,886

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

		LABOUR		LABOUR		MAT/EQUIP		MAT/EQUIP		TOTAL	TOTAL
		QUANTITY	UNIT	UNIT	RATE	ITEM	COST	UNIT	RATE	UNIT	COST
19:PLUMBING											
19.10	Complete plumbing, including:	24	apt		634.00	15,216	1,560.00	37,440	2,194.00	52,656	
	- 24 No. water closets										
	- 32 No. lavatory basins										
	- 24 No. baths, 5'										
	- 1 No. mop service basin										
	- 1 No. laundry tub										
	(the above Crane or equal)										
	- 24 No. kitchen sinks, compartment, stainless steel										
	- 1 No. water heater and storage tank, cap. 300 MBH										
	- 1 No. domestic hot water recirculating pump and accessories										
	- rough-in, waste and vent										
	- roof drains										
SUBTOTAL/PLUMBING		28.36	/M2 GFA			15,216		37,440		52,656	
20:HEATING											
20.10	Hot water circulation system (268 m total length) with radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24	apt		376.00	9,024	823.00	19,752	1,199.00	28,776	
SUBTOTAL/HEATING		15.50	/M2 GFA			9,024		19,752		28,776	

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
21:VENTILATION								
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans	24	apt	72.00	1,728	210.00	5,040	282.00	6,768
SUBTOTAL/VENTILATION	3.64	/M2 GFA		1,728		5,040		6,768
22:FIRE PROTECTION								
22.10 Fire protection system, complete for 24-unit apartment building	24	apt	28.00	672	53.00	1,272	81.00	1,944
SUBTOTAL/FIRE PROTECTION	1.05	/M2 GFA		672		1,272		1,944
23:ELECTRICAL								
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and power outlets for TV, phone and razor; vent fan, door-bell with two presses, 100 A service board and fire alarm system (includes \$200 per apartment for electrical fixtures)	24	apt	653.00	15,672	967.00	23,208	1,620.00	38,880
SUBTOTAL/ELECTRICAL	20.94	/M2 GFA		15,672		23,208		38,880

WALK - UP APARTMENT

EDMONTON

CONSTRUCTION COST ESTIMATE

				LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
		QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
24:SITE OVERHEADS									
24.10	Site overheads	24	apt	1,335.00	32,040	665.00	15,960	2,000.00	48,000
	- setup								
	- supervision								
	- plant								
	- site office								
	- small tools								
	- security								
	- boarding, etc.								
SUBTOTAL/SITE OVERHEADS		25.85	/M2 GFA		32,040		15,960		48,000
25:GENERAL CONTRACTOR'S OVERHEADS & PROFIT									
25.10	General Contractor's Overhead & Profit	24	apt	665.00	15,960	335.00	8,040	1,000.00	24,000
	- permits								
	- bonds								
	- insurance								
	- office overhead								
	- profit								
SUBTOTAL/GENERAL CONTRACTOR'S OVHD & PROFIT		12.92	/M2 GFA		15,960		8,040		24,000
TOTAL / EDMONTON		\$337.09	/M2 GFA		\$227,892		\$398,082		\$ 625,974

DETAILED COST ESTIMATES FOR CALGARY

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
1:EXCAVATION								
1.10 Excavate for basement, wall footings and bases	891	m3	0.44	392	1.30	1,158	1.74	1,550
1.20 Backfill to basement walls, footings and bases	188	m3	0.37	70	1.26	237	1.63	306
1.30 150 mm gravel or sand bed under slab on grade	70	m3	2.85	200	12.00	840	14.85	1,040
1.40 Vapour barrier .152 mm polyethylene on gravel or sand bed	501	m2	0.75	376	0.21	105	0.96	481
SUBTOTAL/EXCAVATION	1.82	/M2 GFA		1,037		2,340		3,377
2:CONCRETE								
2.10 Concrete (25 MPa) in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced conc. footing	58	m3	0.00	0	89.10	5,168	89.10	5,168
2.20 Reinforcing steel in footings and basement walls (material only)	1,652	kg	0.00	0	0.59	975	0.59	975
2.30 Form, place rebar and pour concrete in footing (560 x 250 mm) (subcontract)	222	m	5.15	1,143	1.80	400	6.95	1,543

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
2.35 Form, place rebar and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	14.84	1,425	5.61	539	20.45	1,963
2.40 90 mm concrete (20 MPa) in slab on grade	456	m2	3.40	1,550	7.43	3,388	10.83	4,938
2.45 150 x 150 mm welded wire mesh reinforcement to slab on grade (material only)	456	m2	0.00	0	2.82	1,286	2.82	1,286
2.55 38 mm thick rigid insulation to concrete wall (basement)	117	m2	1.85	216	3.30	386	5.15	603
2.60 Parging to concrete walls	29	m2	7.98	231	2.43	70	10.41	302
SUBTOTAL/CONCRETE	9.03	/M2 GFA		4,566		12,211		16,777
3:DAMPROOFING								
3.10 Two coats asphaltic emulsion on concrete walls	159	m2	0.24	38	0.24	38	0.48	76
3.20 100 mm perforated plastic weeping tile in crushed gravel surround	96	m	2.45	235	3.31	318	5.76	553
SUBTOTAL/DAMPROOFING	0.34	/M2 GFA		273		356		629
4:SIDING								
4.10 Prefinished aluminum siding	98	m2	4.40	431	12.00	1,176	16.40	1,607

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
4.40 Stained dark-brown cedar siding 25 x 150 mm channel to column	700	FBM	0.64	448	0.93	651	1.57	1,099
4.50 Stucco on wire mesh on building paper	678	m2	9.25	6,272	4.56	3,092	13.81	9,363
4.60 24 ga. aluminum vented metal soffit c/w edge moulding	59	m2	4.05	239	8.58	506	12.63	745
SUBTOTAL/SIDING	6.90	/M2 GFA		7,390		5,425		12,815
5:ROOFING/SHEET METAL								
5.10 Built-up asphalt roofing completed with mineral granular and flashing	527	m2	19.00	10,013	16.00	8,432	35.00	18,445
5.30 R.S.I. 6 (R34) batt insulation in joist space	527	m2	1.48	780	6.01	3,167	7.49	3,947
5.40 .102 mm polyethylene vapour barrier	580	m2	0.22	128	0.11	64	0.33	191
SUBTOTAL/ROOFING/SHEET METAL	12.16	/M2 GFA		10,921		11,663		22,584
6:CARPENTRY - ROUGH								
6.10 Material only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (2-38 x 235 mm) - spruce	38	MFBM	0.00	0	632.00	24,016	632.00	24,016

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE .

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
6.20 Material only	44	MFBM	0.00	0	471.00	20,724	471.00	20,724
No. 2 grade fir or spruce as below								
framing (38 x 140 mm) - fir								
plate (38 x 140 mm) - fir								
cross bridging (38 x 38 mm) - spruce								
framing (38 x 89 mm) - spruce								
framing (38 x 140 mm) - spruce								
blocking (38 x 89 mm) - spruce								
blocking (38 x 140 mm) - spruce								
wall strapping (38 x 38 mm) - spruce								
fascia (19 x 140 mm) - spruce								
6.30 Material only - Sheathing	4,051	m2	0.00	0	6.17	24,995	6.17	24,995
19 mm plywood - floor underlay	1432	m2						
13 mm tentest - u/s of joist	1368	m2						
10 mm plywood - roof sheathing	524	m2						
8 mm plywood - wall sheathing	727	m2						
6.40 Labour only - complete framing including installation of windows	1,857	m2	18.89	35,079	0.00	0	18.89	35,079
6.50 90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves)	99	m	0.39	39	0.54	53	0.93	92
SUBTOTAL/CARPENTRY - ROUGH	56.49	/M2 GFA		35,117		69,788		104,905

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
7:CARPENTRY - FINISH								
7.10 Stair - 6 flights @ (2x6x7 = 84 risers)	2	No	497.00	994	303.00	606	800.00	1,600
38 x 300 mm stringers - 59 m								
38 x 235 mm treads - 103 m								
6 x 275 mm fir plywood in risers - 105 m								
7.30 Select grade fir in window and door	3,314	m	0.73	2,419	1.01	3,347	1.74	5,766
trim, base; 40 x 12 mm								
- window 431 m								
- door 555 m								
- base 2328 m								
= TOTAL 3314 m								
SUBTOTAL/CARPENTRY - FINISH	3.97	/M2 GFA		3,413		3,953		7,366
8:WINDOWS AND GLAZING								
8.10 Double-glazed patio door in wood	18	No	0.00	0	719.00	12,942	719.00	12,942
frame with aluminum cladding,								
(size 2.4 x 1.8 m), including								
hardware								
8.20 Double-glazed sealed window in	4	No	0.00	0	792.00	3,168	792.00	3,168
steel frame, with wired glass								
(size 2.4 x 2.55 m)								

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
8.30 Double-glazed sliding units in wood frame (size 2.4 x .9 m), aluminum sliders, screen, incl. hardware	6	No	0.00	0	225.00	1,350	225.00	1,350
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m), aluminum sliders, screen, incl. hardware	28	No	0.00	0	152.00	4,256	152.00	4,256
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m), aluminum sliders, screen, incl. hardware	3	No	0.00	0	124.00	372	124.00	372
SUBTOTAL/WINDOWS AND GLAZING	11.89	/M2 GFA		0		22,088		22,088
9:SEALANTS								
9.10 Caulk - exterior (exterior doors, windows, junction of siding and concrete)	725	m	0.36	261	0.22	160	0.58	421
9.20 Caulk - interior (ceramic tile)	227	m	0.98	222	0.53	120	1.51	343
SUBTOTAL/SEALANTS	0.41	/M2 GFA		483		280		763
10:DOORS								
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold	3	No	204.00	612	1,303.00	3,909	1,507.00	4,521

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.06 Fire Rated door and side light with 0.9 x 0.21 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8	No	170.00	1,360	973.00	7,784	1,143.00	9,144
10.09 Solid core door and frame, rotary cut mahogany - 25 No. .9x2.1mx44mm (20 min label) - 26 No. .85 x 2.1 m x 44 mm = 51 No. TOTAL	51	No	18.00	918	154.00	7,854	172.00	8,772
10.20 Hollow core door and frame rotary cut mahogany face - 24 No. .7 x 2. m x 35 mm - 24 No. .75 x 2. m x 35 mm = 48 No. TOTAL	48	No	11.00	528	33.99	1,632	44.99	2,160
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1	No.	18.00	18	184.00	184	202.00	202

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.30 Metal Folding Bi-fold doors, with tracks and pulls	78	No.	11.00	858	106.00	8,268	117.00	9,126
- 28 No. 1.8 x 2. m								
- 14 No. 1.5 x 2. m								
- 6 No. 1.2 x 2. m								
- 14 No. .9 x 2. m								
- 16 No. .6 x 2. m								
= 78 No. TOTAL								
SUBTOTAL/DOORS	18.27	/M2 GFA		4,294		29,631		33,925
11: HARDWARE								
11.15 Lock sets to interior doors	25	set	10.00	250	21.99	550	31.99	800
11.25 Butts to interior doors (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets	81	set	7.00	567	9.99	809	16.99	1,376
11.40 Bathroom privacy latch sets	24	set	7.00	168	11.99	288	18.99	456
11.50 Door closers (rated)	11	No	12.00	132	26.00	286	38.00	418
SUBTOTAL/HARDWARE	1.64	/M2 GFA		1,117		1,933		3,050
12: CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm, thinset on drywall	137	m2	19.00	2,603	16.15	2,213	35.15	4,816
SUBTOTAL/CERAMIC TILING	2.59	/M2 GFA		2,603		2,213		4,816

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

		QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
13:WALLBOARD									
13.10	Gypsum wallboard, taped and sanded 13 mm standard on walls	3,945	m2	2.25	8,876	1.51	5,957	3.76	14,833
13.13	Gypsum wallboard, taped and sanded 13 mm fire retardant - walls 666 m2 - stair soffit 29 m2 = TOTAL 695 m2	695	m2	2.48	1,724	1.90	1,321	4.38	3,044
13.14	Gypsum wallboard, taped and sanded 15.9 mm thick	487	m2	2.48	1,208	2.34	1,140	4.82	2,347
13.15	Gypsum wallboard, taped and sanded 15.9 fire retardant shaft enclosure	63	m2	4.48	282	2.54	160	7.02	442
13.16	Gypsum wallboard, taped and sanded 15.9 mm fire retardant with sound bar on ceiling	1,887	m2	3.48	6,567	2.74	5,170	6.22	11,737
13.17	2 layers gypsum wallboard, taped and sanded, 15.9 mm fire retardant with sound bar on ceiling	4	m2	5.11	20	5.47	22	10.58	42
13.30	Tentest board, Crane 3-183 Redcliffe	524	m2	3.43	1,797	2.29	1,200	5.72	2,997
13.40	Finish to ceilings - textured	1,425	m2	0.95	1,354	0.97	1,382	1.92	2,736

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
13.70 Vapour barrier, .102 mm polyethylene	1,346	m2	0.22	296	0.11	148	0.33	444
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls	728	m2	0.74	539	3.66	2,664	4.40	3,203
13.86 Batt insulation RSI - 3.5 (R20) to interior walls	908	m2	0.74	672	3.66	3,323	4.40	3,995
SUBTOTAL/WALLBOARD	24.68	/M2 GFA		23,335		22,487		45,822
14:FLOORING								
14.10 Sheet vinyl flooring. .065 gauge with adhesive to subfloor	364	m2	4.75	1,729	10.50	3,822	15.25	5,551
14.20 Carpet, 20 oz. 100% Nylon 13 mm thick chip foam underlay	1,296	m2	3.00	3,888	12.60	16,330	15.60	20,218
14.30 'Neoprene Hypalon' waterproofing or equal to balcony	67	m2	15.00	1,005	20.00	1,340	35.00	2,345
14.40 Gypcrete floor topping including steel trowel finish	1,338	m2	6.50	8,697	3.20	4,282	9.70	12,979
SUBTOTAL/FLOORING	22.13	/M2 GFA		15,319		25,773		41,092
15:PAINTING								
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy	26	m2	3.60	94	1.00	26	4.60	120

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
15.14 Prepare, prime, two coats enamel on metal railing and balustrade	783	m	1.25	979	0.80	626	2.05	1,605
15.22 Interior work - Prepare, 1 coat primer sealer, 1 coat latex or semigloss paint on drywall - walls 4962 m2 - ceiling 234 m2 = TOTAL 5196 m2	5,196	m2	1.66	8,625	0.58	3,014	2.24	11,639
15.30 Two coats urethane varnish on doors and frames	105	No	18.00	1,890	5.00	525	23.00	2,415
15.40 Prepare, prime, one coat semigloss on base	2,328	m	0.59	1,374	0.11	256	0.70	1,630
15.50 Prepare, prime, one coat semigloss on shelving	94	m2	1.95	183	0.38	36	2.33	219
SUBTOTAL/PAINTING	9.49	/M2 GFA		13,145		4,483		17,627
16:FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	3.15	337	3.66	392	6.81	729

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
16.20 Vanity and cabinets, plastic laminated top to lower cabinets, drawers, shelves etc.	195	m	26.00	5,070	162.00	31,590	188.00	36,660
- Lower vanity and cupboard	27	m						
- Wall units	99	m						
- Worktop unit	69	m						
= TOTAL	195	m						
SUBTOTAL/FITTINGS	20.13	/M2 GFA		5,407		31,982		37,389
17:SPECIALTIES								
17.10 Washroom accessories	96	No	4.50	432	8.00	768	12.50	1,200
- 24 No. toilet paper holders								
- 24 No. soap dishes								
- 48 No. towel bars								
= 96 No. TOTAL								
17.20 Medicine cabinet	24	No	9.00	216	33.00	792	42.00	1,008
17.30 25 mm dia. shower curtain rod, chrome	24	No	5.00	120	6.00	144	11.00	264
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts	1	set	55.00	55	355.00	355	410.00	410
17.50 Coat rods, chrome, 18 mm dia.	24	No	3.00	72	5.00	120	8.00	192
17.60 Drapery tracks	102	m	3.00	306	8.00	816	11.00	1,122

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
17.70 970 mm high metal railing c/w balusters 100 mm o.c. max to balconies	98	m	10.00	980	39.00	3,822	49.00	4,802
17.80 Metal railing and balusters with vinyl cap	66	m	10.00	660	35.00	2,310	45.00	2,970
17.90 Handrail: 50 mm dia. pipe & brackets	54	m	22.00	1,188	41.00	2,214	63.00	3,402
SUBTOTAL/SPECIALTIES	8.28	/M2 GFA		4,029		11,341		15,370
18:APPLIANCES								
18.10 Range, freestanding, 760 mm (30") top 4 surface elements, oven auto timer	24	No	15.00	360	474.00	11,376	489.00	11,736
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24	No	15.00	360	448.00	10,752	463.00	11,112
18.30 Range hood	24	No	15.00	360	86.00	2,064	101.00	2,424
18.40 Coin operated dryer	2	No	15.00	30	556.00	1,112	571.00	1,142
18.50 Coin operated washer	2	No	15.00	30	721.00	1,442	736.00	1,472
SUBTOTAL/APPLIANCES	15.02	/M2 GFA		1,140		26,746		27,886

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

		LABOUR		LABOUR		MAT/EQUIP		MAT/EQUIP		TOTAL	TOTAL
		QUANTITY	UNIT	UNIT	RATE	ITEM	COST	UNIT	RATE	ITEM	COST
19:PLUMBING											
19.10	Complete plumbing, including:	24	apt		644.00	15,456	1,450.00	34,800	2,094.00	50,256	
	- 24 No. water closets										
	- 32 No. lavatory basins										
	- 24 No. baths, 5'										
	- 1 No. mop service basin										
	- 1 No. laundry tub										
	(the above Crane or equal)										
	- 24 No. kitchen sinks, compartment,										
	stainless steel										
	- 1 No. water heater and storage										
	tank, cap. 300 MBH										
	- 1 No. domestic hot water recircula-										
	ting pump and accessories										
	- rough-in, waste and vent										
	- roof drains										
SUBTOTAL/PLUMBING		27.06	/M2 GFA			15,456		34,800		50,256	
20:HEATING											
20.10	Hot water circulation system	24	apt		364.00	8,736	797.00	19,128	1,161.00	27,864	
	(268 m total length) with radiators,										
	24 control valves, one centrifugal										
	circulation pump, complete with all										
	piping, 50 gallon expansion tank,										
	hot water heating boiler and gas										
	supply system.										
SUBTOTAL/HEATING		15.00	/M2 GFA			8,736		19,128		27,864	

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
21:VENTILATION								
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans	24	apt	75.00	1,800	210.00	5,040	285.00	6,840
SUBTOTAL/VENTILATION	3.68	/M2 GFA		1,800		5,040		6,840
22:FIRE PROTECTION								
22.10 Fire protection system, complete for 24-unit apartment building	24	apt	28.00	672	53.00	1,272	81.00	1,944
SUBTOTAL/FIRE PROTECTION	1.05	/M2 GFA		672		1,272		1,944
23:ELECTRICAL								
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and power outlets for TV, phone and razor; vent fan, door- bell with two presses, 100 A service board and fire alarm system (includes \$200 per apartment for electrical fixtures)	24	apt	698.00	16,752	963.00	23,112	1,661.00	39,864
SUBTOTAL/ELECTRICAL	21.47	/M2 GFA		16,752		23,112		39,864

WALK - UP APARTMENT

CALGARY

CONSTRUCTION COST ESTIMATE

				LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL					
	QUANTITY	UNIT	UNIT	RATE	ITEM	COST	UNIT	RATE	ITEM	COST	UNIT	RATE	ITEM	COST
24:SITE OVERHEADS														
24.10 Site overheads	24	apt		1,335.00		32,040		665.00		15,960	2,000.00		48,000	
- setup														
- supervision														
- plant														
- site office														
- small tools														
- security														
- boarding, etc.														
SUBTOTAL/SITE OVERHEADS	25.85	/M2	GFA			32,040				15,960				48,000
25:GENERAL CONTRACTOR'S OVERHEADS & PROFIT														
25.10 General Contractor's Overhead & Profit	24	apt		665.00		15,960		335.00		8,040	1,000.00		24,000	
- permits														
- bonds														
- insurance														
- office overhead														
- profit														
SUBTOTAL/GENERAL CONTRACTOR'S OVHD & PROFIT	12.92	/M2	GFA			15,960				8,040				24,000
TOTAL / CALGARY														
	\$332.28	/M2	GFA			\$225,005				\$392,044				\$ 617,049

DETAILED COST ESTIMATES FOR RED DEER

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

				LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT	RATE	ITEM	COST	UNIT	RATE	COST
1:EXCAVATION									
1.10 Excavate for basement, wall footings and bases	891	m3		0.40	356	0.78	695	1.18	1,051
1.20 Backfill to basement walls, footings and bases	188	m3		0.36	68	0.70	132	1.06	199
1.30 150 mm gravel or sand bed under slab on grade	70	m3		2.85	200	8.50	595	11.35	795
1.40 Vapour barrier .152 mm polyethylene on gravel or sand bed	501	m2		0.79	396	0.21	105	1.00	501
SUBTOTAL/EXCAVATION	1.37	/M2 GFA			1,019		1,527		2,546
2:CONCRETE									
2.10 Concrete (25 MPa) in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced conc. footing	58	m3		0.00	0	84.97	4,928	84.97	4,928
2.20 Reinforcing steel in footings and basement walls (material only)	1,652	kg		0.00	0	0.62	1,024	0.62	1,024
2.30 Form, place rebar and pour concrete in footing (560 x 250 mm) (subcontract)	222	m		5.50	1,221	2.39	531	7.89	1,752

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
2.35 Form, place rebar and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	15.84	1,521	7.47	717	23.31	2,238
2.40 90 mm concrete (20 MPa) in slab on grade	456	m2	3.63	1,655	7.08	3,228	10.71	4,884
2.45 150 x 150 mm welded wire mesh reinforcement to slab on grade (material only)	456	m2	0.00	0	2.96	1,350	2.96	1,350
2.55 38 mm thick rigid insulation to concrete wall (basement)	117	m2	1.88	220	3.30	386	5.18	606
2.60 Parging to concrete walls	29	m2	8.53	247	2.32	67	10.85	315
SUBTOTAL/CONCRETE	9.21	/M2 GFA		4,864		12,232		17,096
3:DAMPROOFING								
3.10 Two coats asphaltic emulsion on concrete walls	159	m2	0.33	52	0.33	52	0.66	105
3.20 100 mm perforated plastic weeping tile in crushed gravel surround	96	m	3.60	346	3.60	346	7.20	691
SUBTOTAL/DAMPROOFING	0.43	/M2 GFA		398		398		796
4:SIDING								
4.10 Prefinished aluminum siding	98	m2	6.18	606	12.25	1,201	18.43	1,806

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
4.40 Stained dark-brown cedar siding 25 x 150 mm channel to column	700	FBM	0.66	462	0.95	665	1.61	1,127
4.50 Stucco on wire mesh on building paper	678	m2	9.25	6,272	4.56	3,092	13.81	9,363
4.60 24 ga. aluminum vented metal soffit c/w edge moulding	59	m2	5.15	304	8.58	506	13.73	810
SUBTOTAL/SIDING	7.06	/M2 GFA		7,643		5,463		13,106
5:ROOFING/SHEET METAL								
5.10 Built-up asphalt roofing completed with mineral granular and flashing	527	m2	19.00	10,013	17.00	8,959	36.00	18,972
5.30 R.S.I. 6 (R34) batt insulation in joist space	527	m2	1.50	791	6.01	3,167	7.51	3,958
5.40 .102 mm polyethylene vapour barrier	580	m2	0.24	139	0.11	64	0.35	203
SUBTOTAL/ROOFING/SHEET METAL	12.46	/M2 GFA		10,943		12,190		23,133
6:CARPENTRY - ROUGH								
6.10 Material only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (2-38 x 235 mm) - spruce	38	MFBM	0.00	0	632.00	24,016	632.00	24,016

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
6.20 Material only	44	MFBM	0.00	0	471.00	20,724	471.00	20,724
No. 2 grade fir or spruce as below								
framing (38 x 140 mm) - fir								
plate (38 x 140 mm) - fir								
cross bridging (38 x 38 mm) - spruce								
framing (38 x 89 mm) - spruce								
framing (38 x 140 mm) - spruce								
blocking (38 x 89 mm) - spruce								
blocking (38 x 140 mm) - spruce								
wall strapping (38 x 38 mm) - spruce								
fascia (19 x 140 mm) - spruce								
6.30 Material only - Sheathing	4,051	m2	0.00	0	6.17	24,995	6.17	24,995
19 mm plywood - floor underlay	1432	m2						
13 mm tentest - u/s of joist	1368	m2						
10 mm plywood - roof sheathing	524	m2						
8 mm plywood - wall sheathing	727	m2						
6.40 Labour only - complete framing	1,857	m2	19.88	36,917	0.00	0	19.88	36,917
including installation of windows								
6.50 90 x 238 mm wide R.S.I. 2.1 (R12)	99	m	0.39	39	0.54	53	0.93	92
batt insulation (vertical eaves)								
SUBTOTAL/CARPENTRY - ROUGH	57.48	/M2 GFA		36,956		69,788		106,744

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
7:CARPENTRY - FINISH								
7.10 Stair - 6 flights @ (2x6x7 = 84 risers)	2	No	460.00	920	303.00	606	763.00	1,526
38 x 300 mm stringers - 59 m								
38 x 235 mm treads - 103 m								
6 x 275 mm fir plywood in risers - 105 m								
7.30 Select grade fir in window and door	3,314	m	0.68	2,254	1.01	3,347	1.69	5,601
trim, base; 40 x 12 mm								
- window 431 m								
- door 555 m								
- base 2328 m								
= TOTAL 3314 m								
SUBTOTAL/CARPENTRY - FINISH	3.84	/M2 GFA		3,174		3,953		7,127
8:WINDOWS AND GLAZING								
8.10 Double-glazed patio door in wood	18	No	0.00	0	843.00	15,174	843.00	15,174
frame with aluminum cladding,								
(size 2.4 x 1.8 m), including								
hardware								
8.20 Double-glazed sealed window in	4	No	0.00	0	816.00	3,264	816.00	3,264
steel frame, with wired glass								
(size 2.4 x 2.55 m)								

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
8.30 Double-glazed sliding units in wood frame (size 2.4 x .9 m), aluminum sliders, screen, incl. hardware	6	No	0.00	0	231.00	1,386	231.00	1,386
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m), aluminum sliders, screen, incl. hardware	28	No	0.00	0	156.00	4,368	156.00	4,368
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m), aluminum sliders, screen, incl. hardware	3	No	0.00	0	127.00	381	127.00	381
SUBTOTAL/WINDOWS AND GLAZING	13.23	/M2 GFA		0		24,573		24,573
9:SEALANTS								
9.10 Caulk - exterior (exterior doors, windows, junction of siding and concrete)	725	m	0.36	261	0.22	160	0.58	421
9.20 Caulk - interior (ceramic tile)	227	m	0.98	222	0.53	120	1.51	343
SUBTOTAL/SEALANTS	0.41	/M2 GFA		483		280		763
10:DOORS								
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold	3	No	220.00	660	1,402.00	4,206	1,622.00	4,866

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.06 Fire Rated door and side light with 0.9 x 0.21 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8	No	180.00	1,440	1,046.00	8,368	1,226.00	9,808
10.09 Solid core door and frame, rotary cut mahogany - 25 No. .9x2.1mx44mm (20 min label) - 26 No. .85 x 2.1 m x 44 mm = 51 No. TOTAL	51	No	20.00	1,020	160.00	8,160	180.00	9,180
10.20 Hollow core door and frame rotary cut mahogany face - 24 No. .7 x 2. m x 35 mm - 24 No. .75 x 2. m x 35 mm = 48 No. TOTAL	48	No	11.00	528	33.99	1,632	44.99	2,160
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1	No.	20.00	20	189.00	189	209.00	209

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.30 Metal Folding Bi-fold doors, with tracks and pulls	78	No.	11.00	858	110.00	8,580	121.00	9,438
- 28 No. 1.8 x 2. m								
- 14 No. 1.5 x 2. m								
- 6 No. 1.2 x 2. m								
- 14 No. .9 x 2. m								
- 16 No. .6 x 2. m								
= 78 No. TOTAL								
SUBTOTAL/DOORS	19.20	/M2 GFA		4,526		31,135		35,661
11:HARDWARE								
11.15 Lock sets to interior doors	25	set	10.00	250	21.99	550	31.99	800
11.25 Butts to interior doors (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets	81	set	7.00	567	9.99	809	16.99	1,376
11.40 Bathroom privacy latch sets	24	set	7.00	168	11.99	288	18.99	456
11.50 Door closers (rated)	11	No	12.00	132	26.00	286	38.00	418
SUBTOTAL/HARDWARE	1.64	/M2 GFA		1,117		1,933		3,050
12:CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm, thinset on drywall	137	m2	21.00	2,877	16.15	2,213	37.15	5,090
SUBTOTAL/CERAMIC TILING	2.74	/M2 GFA		2,877		2,213		5,090

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

		LABOUR		LABOUR		MAT/EQUIP		MAT/EQUIP		TOTAL	TOTAL
		QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
13:WALLBOARD											
13.10	Gypsum wallboard, taped and sanded 13 mm standard on walls	3,945	m2	2.25	8,876	1.68	6,628	3.93	15,504		
13.13	Gypsum wallboard, taped and sanded 13 mm fire retardant - walls 666 m2 - stair soffit 29 m2 = TOTAL 695 m2	695	m2	2.48	1,724	2.12	1,473	4.60	3,197		
13.14	Gypsum wallboard, taped and sanded 15.9 mm thick	487	m2	2.48	1,208	2.61	1,271	5.09	2,479		
13.15	Gypsum wallboard, taped and sanded 15.9 fire retardant shaft enclosure	63	m2	4.48	282	2.81	177	7.29	459		
13.16	Gypsum wallboard, taped and sanded 15.9 mm fire retardant with sound bar on ceiling	1,887	m2	3.48	6,567	3.01	5,680	6.49	12,247		
13.17	2 layers gypsum wallboard, taped and sanded, 15.9 mm fire retardant with sound bar on ceiling	4	m2	5.11	20	6.08	24	11.19	45		
13.30	Tentest board, Crane 3-183 Redcliffe	524	m2	4.05	2,122	2.29	1,200	6.34	3,322		
13.40	Finish to ceilings - textured	1,425	m2	1.07	1,525	1.03	1,468	2.10	2,993		

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
13.70 Vapour barrier, .102 mm polyethylene	1,346	m2	0.24	323	0.11	148	0.35	471
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls	728	m2	0.75	546	3.66	2,664	4.41	3,210
13.86 Batt insulation RSI - 3.5 (R20) to interior walls	908	m2	0.75	681	3.66	3,323	4.41	4,004
SUBTOTAL/WALLBOARD	25.81	/M2 GFA		23,874		24,057		47,931
14:FLOORING								
14.10 Sheet vinyl flooring. .065 gauge with adhesive to subfloor	364	m2	5.25	1,911	10.50	3,822	15.75	5,733
14.20 Carpet, 20 oz. 100% Nylon 13 mm thick chip foam underlay	1,296	m2	3.00	3,888	13.13	17,016	16.13	20,904
14.30 'Neoprene Hypalon' waterproofing or equal to balcony	67	m2	17.00	1,139	22.00	1,474	39.00	2,613
14.40 Gypcrete floor topping including steel trowel finish	1,338	m2	7.50	10,035	3.80	5,084	11.30	15,119
SUBTOTAL/FLOORING	23.89	/M2 GFA		16,973		27,397		44,370
15:PAINTING								
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy	26	m2	3.90	101	1.13	29	5.03	131

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
15.14 Prepare, prime, two coats enamel on metal railing and balustrade	783	m	1.41	1,104	0.88	689	2.29	1,793
15.22 Interior work - Prepare, 1 coat primer sealer, 1 coat latex or semigloss paint on drywall - walls 4962 m2 - ceiling 234 m2 = TOTAL 5196 m2	5,196	m2	1.92	9,976	0.63	3,273	2.55	13,250
15.30 Two coats urethane varnish on doors and frames	105	No	18.50	1,943	5.50	578	24.00	2,520
15.40 Prepare, prime, one coat semigloss on base	2,328	m	0.66	1,536	0.13	303	0.79	1,839
15.50 Prepare, prime, one coat semigloss on shelving	94	m2	2.15	202	0.42	39	2.57	242
SUBTOTAL/PAINTING	10.65	/M2 GFA		14,863		4,912		19,774
16:FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	3.20	342	3.99	427	7.19	769

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
16.20 Vanity and cabinets, plastic laminated top to lower cabinets, drawers, shelves etc.	195	m	27.00	5,265	162.00	31,590	189.00	36,855
- Lower vanity and cupboard	27	m						
- Wall units	99	m						
- Worktop unit	69	m						
= TOTAL	195	m						
SUBTOTAL/FITTINGS	20.26	/M2 GFA		5,607		32,017		37,624
17:SPECIALTIES								
17.10 Washroom accessories	96	No	4.50	432	8.00	768	12.50	1,200
- 24 No. toilet paper holders								
- 24 No. soap dishes								
- 48 No. towel bars								
= 96 No. TOTAL								
17.20 Medicine cabinet	24	No	9.00	216	33.00	792	42.00	1,008
17.30 25 mm dia. shower curtain rod, chrome	24	No	5.00	120	6.00	144	11.00	264
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts	1	set	55.00	55	355.00	355	410.00	410
17.50 Coat rods, chrome, 18 mm dia.	24	No	3.00	72	5.00	120	8.00	192
17.60 Drapery tracks	102	m	3.00	306	8.00	816	11.00	1,122

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
17.70 970 mm high metal railing c/w balusters 100 mm o.c. max to balconies	98	m	10.00	980	39.00	3,822	49.00	4,802
17.80 Metal railing and balusters with vinyl cap	66	m	10.00	660	35.00	2,310	45.00	2,970
17.90 Handrail: 50 mm dia. pipe & brackets	54	m	22.00	1,188	41.00	2,214	63.00	3,402
SUBTOTAL/SPECIALTIES	8.28	/M2 GFA		4,029		11,341		15,370
18:APPLIANCES								
18.10 Range, freestanding, 760 mm (30") top 4 surface elements, oven auto timer	24	No	15.00	360	474.00	11,376	489.00	11,736
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24	No	15.00	360	448.00	10,752	463.00	11,112
18.30 Range hood	24	No	15.00	360	86.00	2,064	101.00	2,424
18.40 Coin operated dryer	2	No	15.00	30	569.00	1,138	584.00	1,168
18.50 Coin operated washer	2	No	15.00	30	721.00	1,442	736.00	1,472
SUBTOTAL/APPLIANCES	15.03	/M2 GFA		1,140		26,772		27,912

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
19:PLUMBING								
19.10 Complete plumbing, including:	24	apt	669.00	16,056	1,558.00	37,392	2,227.00	53,448
- 24 No. water closets								
- 32 No. lavatory basins								
- 24 No. baths, 5'								
- 1 No. mop service basin								
- 1 No. laundry tub								
(the above Crane or equal)								
- 24 No. kitchen sinks, compartment, stainless steel								
- 1 No. water heater and storage tank, cap. 300 MBH								
- 1 No. domestic hot water recircula- ting pump and accessories								
- rough-in, waste and vent								
- roof drains								
SUBTOTAL/PLUMBING	28.78	/M2 GFA		16,056		37,392		53,448
20:HEATING								
20.10 Hot water circulation system (268 m total length) with radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24	apt	384.00	9,216	868.00	20,832	1,252.00	30,048
SUBTOTAL/HEATING	16.18	/M2 GFA		9,216		20,832		30,048

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	UNIT RATE	LABOUR ITEM COST	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
21:VENTILATION									
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans	24	apt	73.00	1,752		211.00	5,064	284.00	6,816
SUBTOTAL/VENTILATION	3.67	/M2 GFA		1,752			5,064		6,816
22:FIRE PROTECTION									
22.10 Fire protection system, complete for 24-unit apartment building	24	apt	28.00	672		53.00	1,272	81.00	1,944
SUBTOTAL/FIRE PROTECTION	1.05	/M2 GFA		672			1,272		1,944
23:ELECTRICAL									
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and power outlets for TV, phone and razor; vent fan, door- bell with two presses, 100 A service board and fire alarm system (includes \$200 per apartment for electrical fixtures)	24	apt	906.00	21,744		1,075.00	25,800	1,981.00	47,544
SUBTOTAL/ELECTRICAL	25.60	/M2 GFA		21,744			25,800		47,544

WALK - UP APARTMENT

RED DEER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL ITEM COST
24:SITE OVERHEADS								
24.10 Site overheads	24	apt	1,335.00	32,040	665.00	15,960	2,000.00	48,000
- setup								
- supervision								
- plant								
- site office								
- small tools								
- security								
- boarding, etc.								
SUBTOTAL/SITE OVERHEADS	25.85	/M2 GFA		32,040		15,960		48,000
25:GENERAL CONTRACTOR'S OVERHEADS & PROFIT								
25.10 General Contractor's Overhead & Profit	24	apt	665.00	15,960	335.00	8,040	1,000.00	24,000
- permits								
- bonds								
- insurance								
- office overhead								
- profit								
SUBTOTAL/GENERAL CONTRACTOR'S OVHD & PROFIT	12.92	/M2 GFA		15,960		8,040		24,000
TOTAL / RED DEER	\$347.05	/M2 GFA		\$237,926		\$406,539		\$ 644,466

DETAILED COST ESTIMATES FOR FORT McMURRAY

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
1:EXCAVATION								
1.10 Excavate for basement, wall footings and bases	891	m3	0.58	517	1.00	891	1.58	1,408
1.20 Backfill to basement walls, footings and bases	188	m3	0.52	98	0.90	169	1.42	267
1.30 150 mm gravel or sand bed under slab on grade	70	m3	3.00	210	18.00	1,260	21.00	1,470
1.40 Vapour barrier .152 mm polyethylene on gravel or sand bed	501	m2	0.86	431	0.26	130	1.12	561
SUBTOTAL/EXCAVATION	2.00	/M2 GFA		1,255		2,450		3,706
2:CONCRETE								
2.10 Concrete (25 MPa) in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced conc. footing	58	m3	0.00	0	130.02	7,541	130.02	7,541
2.20 Reinforcing steel in footings and basement walls (material only)	1,652	kg	0.00	0	0.74	1,222	0.74	1,222
2.30 Form, place rebar and pour concrete in footing (560 x 250 mm) (subcontract)	222	m	5.63	1,250	2.45	544	8.08	1,794

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
2.35 Form, place rebar and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	16.20	1,555	7.66	735	23.86	2,291
2.40 90 mm concrete (20 MPa) in slab on grade	456	m2	3.72	1,696	10.84	4,943	14.56	6,639
2.45 150 x 150 mm welded wire mesh reinforcement to slab on grade (material only)	456	m2	0.00	0	3.54	1,614	3.54	1,614
2.55 38 mm thick rigid insulation to concrete wall (basement)	117	m2	2.20	257	3.55	415	5.75	673
2.60 Parging to concrete walls	29	m2	8.73	253	3.55	103	12.28	356
SUBTOTAL/CONCRETE	11.92	/M2 GFA		5,012		17,118		22,130
3:DAMPPOOFING								
3.10 Two coats asphaltic emulsion on concrete walls	159	m2	0.35	56	0.35	56	0.70	111
3.20 100 mm perforated plastic weeping tile in crushed gravel surround	96	m	6.66	639	4.00	384	10.66	1,023
SUBTOTAL/DAMPPOOFING	0.61	/M2 GFA		695		440		1,135
4:SIDING								
4.10 Prefinished aluminum siding	98	m2	7.11	697	13.50	1,323	20.61	2,020

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
4.40 Stained dark-brown cedar siding 25 x 150 mm channel to column	700	FBM	0.78	546	1.05	735	1.83	1,281
4.50 Stucco on wire mesh on building paper	678	m2	13.50	9,153	6.44	4,366	19.94	13,519
4.60 24 ga. aluminum vented metal soffit c/w edge moulding	59	m2	6.53	385	10.08	595	16.61	980
SUBTOTAL/SIDING	9.59	/M2 GFA		10,781		7,019		17,800
5:ROOFING/SHEET METAL								
5.10 Built-up asphalt roofing completed with mineral granular and flashing	527	m2	28.00	14,756	22.00	11,594	50.00	26,350
5.30 R.S.I. 6 (R34) batt insulation in joist space	527	m2	1.58	833	6.35	3,346	7.93	4,179
5.40 .102 mm polyethylene vapour barrier	580	m2	0.30	174	0.14	81	0.44	255
SUBTOTAL/ROOFING/SHEET METAL	16.58	/M2 GFA		15,763		15,022		30,784
6:CARPENTRY - ROUGH								
6.10 Material only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (2-38 x 235 mm) - spruce	38	MFBM	0.00	0	689.00	26,182	689.00	26,182

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
6.20 Material only	44	MFBM	0.00	0	513.00	22,572	513.00	22,572
No. 2 grade fir or spruce as below								
framing (38 x 140 mm) - fir								
plate (38 x 140 mm) - fir								
cross bridging (38 x 38 mm) - spruce								
framing (38 x 89 mm) - spruce								
framing (38 x 140 mm) - spruce								
blocking (38 x 89 mm) - spruce								
blocking (38 x 140 mm) - spruce								
wall strapping (38 x 38 mm) - spruce								
fascia (19 x 140 mm) - spruce								
6.30 Material only - Sheathing	4,051	m2	0.00	0	7.17	29,046	7.17	29,046
19 mm plywood - floor underlay	1432	m2						
13 mm tentest - u/s of joist	1368	m2						
10 mm plywood - roof sheathing	524	m2						
8 mm plywood - wall sheathing	727	m2						
6.40 Labour only - complete framing including installation of windows	1,857	m2	27.99	51,977	0.00	0	27.99	51,977
6.50 90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves)	99	m	0.42	42	0.57	56	0.99	98
SUBTOTAL/CARPENTRY - ROUGH	69.94	/M2 GFA		52,019		77,856		129,875

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
7:CARPENTRY - FINISH								
7.10 Stair - 6 flights @ (2x6x7 = 84 risers)	2	No	610.00	1,220	381.00	762	991.00	1,982
38 x 300 mm stringers - 59 m								
38 x 235 mm treads - 103 m								
6 x 275 mm fir plywood in risers - 105 m								
7.30 Select grade fir in window and door trim, base; 40 x 12 mm	3,314	m	0.78	2,585	1.05	3,480	1.83	6,065
- window 431 m								
- door 555 m								
- base 2328 m								
= TOTAL 3314 m								
SUBTOTAL/CARPENTRY - FINISH	4.33	/M2 GFA		3,805		4,242		8,047
8:WINDOWS AND GLAZING								
8.10 Double-glazed patio door in wood frame with aluminum cladding, (size 2.4 x 1.8 m), including hardware	18	No	0.00	0	1,067.00	19,206	1,067.00	19,206
8.20 Double-glazed sealed window in steel frame, with wired glass (size 2.4 x 2.55 m)	4	No	0.00	0	850.00	3,400	850.00	3,400

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
8.30 Double-glazed sliding units in wood frame (size 2.4 x .9 m), aluminum sliders, screen, incl. hardware	6	No	0.00	0	239.00	1,434	239.00	1,434
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m), aluminum sliders, screen, incl. hardware	28	No	0.00	0	160.00	4,480	160.00	4,480
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m), aluminum sliders, screen, incl. hardware	3	No	0.00	0	130.00	390	130.00	390
SUBTOTAL/WINDOWS AND GLAZING	15.57	/M2 GFA		0		28,910		28,910
9:SEALANTS								
9.10 Caulk - exterior (exterior doors, windows, junction of siding and concrete)	725	m	0.40	290	0.26	189	0.66	479
9.20 Caulk - interior (ceramic tile)	227	m	1.05	238	0.56	127	1.61	365
SUBTOTAL/SEALANTS	0.45	/M2 GFA		528		316		844
10:DOORS								
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold	3	No	248.00	744	1,393.00	4,179	1,641.00	4,923

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.06 Fire Rated door and side light with 0.9 x 0.21 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8	No	185.00	1,480	1,038.00	8,304	1,223.00	9,784
10.09 Solid core door and frame, rotary cut mahogany - 25 No. .9x2.1mx44mm (20 min label) - 26 No. .85 x 2.1 m x 44 mm = 51 No. TOTAL	51	No	26.00	1,326	186.00	9,486	212.00	10,812
10.20 Hollow core door and frame rotary cut mahogany face - 24 No. .7 x 2. m x 35 mm - 24 No. .75 x 2. m x 35 mm = 48 No. TOTAL	48	No	13.00	624	38.99	1,872	51.99	2,496
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1	No.	26.00	26	216.00	216	242.00	242

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.30 Metal Folding Bi-fold doors, with tracks and pulls	78	No.	13.00	1,014	124.00	9,672	137.00	10,686
- 28 No. 1.8 x 2. m								
- 14 No. 1.5 x 2. m								
- 6 No. 1.2 x 2. m								
- 14 No. .9 x 2. m								
- 16 No. .6 x 2. m								
= 78 No. TOTAL								
SUBTOTAL/DOORS	20.97	/M2 GFA		5,214		33,729		38,943
11:HARDWARE								
11.15 Lock sets to interior doors	25	set	12.00	300	23.99	600	35.99	900
11.25 Butts to interior doors (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets	81	set	8.00	648	9.99	809	17.99	1,457
11.40 Bathroom privacy latch sets	24	set	8.00	192	11.99	288	19.99	480
11.50 Door closers (rated)	11	No	14.00	154	28.00	308	42.00	462
SUBTOTAL/HARDWARE	1.78	/M2 GFA		1,294		2,005		3,299
12:CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm, thinset on drywall	137	m2	26.00	3,562	17.62	2,414	43.62	5,976
SUBTOTAL/CERAMIC TILING	3.22	/M2 GFA		3,562		2,414		5,976

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
13:WALLBOARD								
13.10 Gypsum wallboard, taped and sanded 13 mm standard on walls	3,945	m2	3.33	13,137	2.02	7,969	5.35	21,106
13.13 Gypsum wallboard, taped and sanded 13 mm fire retardant - walls 666 m2 - stair soffit 29 m2 = TOTAL 695 m2	695	m2	3.66	2,544	2.55	1,772	6.21	4,316
13.14 Gypsum wallboard, taped and sanded 15.9 mm thick	487	m2	3.66	1,782	3.14	1,529	6.80	3,312
13.15 Gypsum wallboard, taped and sanded 15.9 fire retardant shaft enclosure	63	m2	4.66	294	3.34	210	8.00	504
13.16 Gypsum wallboard, taped and sanded 15.9 mm fire retardant with sound bar on ceiling	1,887	m2	3.66	6,906	3.54	6,680	7.20	13,586
13.17 2 layers gypsum wallboard, taped and sanded, 15.9 mm fire retardant with sound bar on ceiling	4	m2	7.56	30	7.31	29	14.87	59
13.30 Tentest board, Crane 3-183 Redcliffe	524	m2	4.98	2,610	2.66	1,394	7.64	4,003
13.40 Finish to ceilings - textured	1,425	m2	1.83	2,608	1.26	1,796	3.09	4,403

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
13.70 Vapour barrier, .102 mm polyethylene	1,346	m2	0.30	404	0.14	188	0.44	592
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls	728	m2	0.79	575	3.87	2,817	4.66	3,392
13.86 Batt insulation RSI - 3.5 (R20) to interior walls	908	m2	0.79	717	3.87	3,514	4.66	4,231
SUBTOTAL/WALLBOARD	32.04	/M2 GFA		31,607		27,899		59,506
14:FLOORING								
14.10 Sheet vinyl flooring. .065 gauge with adhesive to subfloor	364	m2	6.00	2,184	11.00	4,004	17.00	6,188
14.20 Carpet, 20 oz. 100% Nylon 13 mm thick chip foam underlay	1,296	m2	3.50	4,536	14.70	19,051	18.20	23,587
14.30 'Neoprene Hypalon' waterproofing or equal to balcony	67	m2	19.00	1,273	25.50	1,709	44.50	2,982
14.40 Gypcrete floor topping including steel trowel finish	1,338	m2	8.40	11,239	4.50	6,021	12.90	17,260
SUBTOTAL/FLOORING	26.93	/M2 GFA		19,232		30,785		50,017
15:PAINTING								
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy	26	m2	5.10	133	1.20	31	6.30	164

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
15.14 Prepare, prime, two coats enamel on metal railing and balustrade	783	m	1.40	1,096	0.91	713	2.31	1,809
15.22 Interior work - Prepare, 1 coat primer sealer, 1 coat latex or semigloss paint on drywall - walls 4962 m2 - ceiling 234 m2 = TOTAL 5196 m2	5,196	m2	2.20	11,431	0.65	3,377	2.85	14,809
15.30 Two coats urethane varnish on doors and frames	105	No	26.00	2,730	5.80	609	31.80	3,339
15.40 Prepare, prime, one coat semigloss on base	2,328	m	0.66	1,536	0.14	326	0.80	1,862
15.50 Prepare, prime, one coat semigloss on shelving	94	m2	2.15	202	0.44	41	2.59	243
SUBTOTAL/PAINTING	11.97	/M2 GFA		17,129		5,097		22,226
16:FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	3.26	349	4.46	477	7.72	826

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
16.20 Vanity and cabinets, plastic laminated top to lower cabinets, drawers, shelves etc.	195	m	33.00	6,435	189.00	36,855	222.00	43,290
- Lower vanity and cupboard	27	m						
- Wall units	99	m						
- Worktop unit	69	m						
= TOTAL	195	m						
SUBTOTAL/FITTINGS	23.76	/M2 GFA		6,784		37,332		44,116
17:SPECIALTIES								
17.10 Washroom accessories	96	No	5.50	528	8.50	816	14.00	1,344
- 24 No. toilet paper holders								
- 24 No. soap dishes								
- 48 No. towel bars								
= 96 No. TOTAL								
17.20 Medicine cabinet	24	No	11.00	264	39.00	936	50.00	1,200
17.30 25 mm dia. shower curtain rod, chrome	24	No	6.00	144	7.00	168	13.00	312
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts	1	set	60.00	60	375.00	375	435.00	435
17.50 Coat rods, chrome, 18 mm dia.	24	No	4.00	96	6.00	144	10.00	240
17.60 Drapery tracks	102	m	4.00	408	10.00	1,020	14.00	1,428

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
17.70 970 mm high metal railing c/w balusters 100 mm o.c. max to balconies	98	m	12.00	1,176	44.00	4,312	56.00	5,488
17.80 Metal railing and balusters with vinyl cap	66	m	12.00	792	39.00	2,574	51.00	3,366
17.90 Handrail: 50 mm dia. pipe & brackets	54	m	26.00	1,404	45.00	2,430	71.00	3,834
SUBTOTAL/SPECIALTIES	9.50	/M2 GFA		4,872		12,775		17,647
18:APPLIANCES								
18.10 Range, freestanding, 760 mm (30") top 4 surface elements, oven auto timer	24	No	18.00	432	495.00	11,880	513.00	12,312
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24	No	18.00	432	469.00	11,256	487.00	11,688
18.30 Range hood	24	No	18.00	432	103.00	2,472	121.00	2,904
18.40 Coin operated dryer	2	No	18.00	36	581.00	1,162	599.00	1,198
18.50 Coin operated washer	2	No	18.00	36	753.00	1,506	771.00	1,542
SUBTOTAL/APPLIANCES	15.96	/M2 GFA		1,368		28,276		29,644

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		LABOUR		LABOUR		MAT/EQUIP		MAT/EQUIP		TOTAL		TOTAL
QUANTITY	UNIT	UNIT	RATE	ITEM	COST	UNIT	RATE	ITEM	COST	UNIT	RATE	COST
19:PLUMBING												
19.10 Complete plumbing, including:	24	apt	700.00		16,800	1,570.00		37,680	2,270.00			54,480
- 24 No. water closets												
- 32 No. lavatory basins												
- 24 No. baths, 5'												
- 1 No. mop service basin												
- 1 No. laundry tub												
(the above Crane or equal)												
- 24 No. kitchen sinks, compartment,												
stainless steel												
- 1 No. water heater and storage												
tank, cap. 300 MBH												
- 1 No. domestic hot water recircula-												
ting pump and accessories												
- rough-in, waste and vent												
- roof drains												
SUBTOTAL/PLUMBING	29.34	/M2 GFA			16,800			37,680				54,480
20:HEATING												
20.10 Hot water circulation system	24	apt	419.00		10,056	1,067.00		25,608	1,486.00			35,664
(268 m total length) with radiators,												
24 control valves, one centrifugal												
circulation pump, complete with all												
piping, 50 gallon expansion tank,												
hot water heating boiler and gas												
supply system.												
SUBTOTAL/HEATING	19.21	/M2 GFA			10,056			25,608				35,664

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

				LABOUR		MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT	RATE	ITEM	COST	UNIT	RATE	COST
21:VENTILATION									
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans	24	apt		90.00	2,160	265.00	6,360	355.00	8,520
SUBTOTAL/VENTILATION	4.59	/M2	GFA		2,160		6,360		8,520
22:FIRE PROTECTION									
22.10 Fire protection system, complete for 24-unit apartment building	24	apt		35.00	840	68.00	1,632	103.00	2,472
SUBTOTAL/FIRE PROTECTION	1.33	/M2	GFA		840		1,632		2,472
23:ELECTRICAL									
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and power outlets for TV, phone and razor; vent fan, door- bell with two presses, 100 A service board and fire alarm system (includes \$200 per apartment for electrical fixtures)	24	apt		834.00	20,016	1,111.00	26,664	1,945.00	46,680
SUBTOTAL/ELECTRICAL	25.14	/M2	GFA		20,016		26,664		46,680

WALK - UP APARTMENT

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

				LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL					
	QUANTITY	UNIT	UNIT	RATE	ITEM	COST	UNIT	RATE	ITEM	COST	UNIT	RATE	ITEM	COST
24:SITE OVERHEADS														
24.10 Site overheads	24	apt		1,335.00		32,040		665.00		15,960		2,000.00		48,000
- setup														
- supervision														
- plant														
- site office														
- small tools														
- security														
- boarding, etc.														
SUBTOTAL/SITE OVERHEADS	25.85	/M2	GFA			32,040				15,960				48,000
25:GENERAL CONTRACTOR'S OVERHEADS & PROFIT														
25.10 General Contractor's Overhead & Profit	24	apt		665.00		15,960		335.00		8,040		1,000.00		24,000
- permits														
- bonds														
- insurance														
- office overhead														
- profit														
SUBTOTAL/GENERAL CONTRACTOR'S OVHD & PROFIT	12.92	/M2	GFA			15,960				8,040				24,000
TOTAL / FORT McMURRAY														
	\$395.49	/M2	GFA			\$278,792				\$455,628				\$ 734,420

DETAILED COST ESTIMATES FOR GRANDE PRAIRIE

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
1:EXCAVATION								
1.10 Excavate for basement, wall footings and bases	891	m3	0.57	508	0.99	882	1.56	1,390
1.20 Backfill to basement walls, footings and bases	188	m3	0.51	96	0.89	167	1.40	263
1.30 150 mm gravel or sand bed under slab on grade	70	m3	3.00	210	11.50	805	14.50	1,015
1.40 Vapour barrier .152 mm polyethylene on gravel or sand bed	501	m2	0.84	421	0.24	120	1.08	541
SUBTOTAL/EXCAVATION	1.73	/M2 GFA		1,235		1,975		3,209
2:CONCRETE								
2.10 Concrete (25 MPa) in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced conc. footing	58	m3	0.00	0	123.85	7,183	123.85	7,183
2.20 Reinforcing steel in footings and basement walls (material only)	1,652	kg	0.00	0	0.67	1,107	0.67	1,107
2.30 Form, place rebar and pour concrete in footing (560 x 250 mm) (subcontract)	222	m	5.57	1,237	2.45	544	8.02	1,780

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
2.35 Form, place rebar and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	16.02	1,538	7.65	734	23.67	2,272
2.40 90 mm concrete (20 MPa) in slab on grade	456	m2	3.68	1,678	10.32	4,706	14.00	6,384
2.45 150 x 150 mm welded wire mesh reinforcement to slab on grade (material only)	456	m2	0.00	0	3.20	1,459	3.20	1,459
2.55 38 mm thick rigid insulation to concrete wall (basement)	117	m2	2.00	234	3.55	415	5.55	649
2.60 Parging to concrete walls	29	m2	8.63	250	3.38	98	12.01	348
SUBTOTAL/CONCRETE	11.41	/M2 GFA		4,937		16,247		21,184
3:DAMPPOOFING								
3.10 Two coats asphaltic emulsion on concrete walls	159	m2	0.35	56	0.35	56	0.70	111
3.20 100 mm perforated plastic weeping tile in crushed gravel surround	96	m	6.00	576	4.00	384	10.00	960
SUBTOTAL/DAMPPOOFING	0.58	/M2 GFA		632		440		1,071
4:SIDING								
4.10 Prefinished aluminum siding	98	m2	6.38	625	13.50	1,323	19.88	1,948

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
4.40 Stained dark-brown cedar siding 25 x 150 mm channel to column	700	FBM	0.66	462	0.95	665	1.61	1,127
4.50 Stucco on wire mesh on building paper	678	m2	13.00	8,814	6.12	4,149	19.12	12,963
4.60 24 ga. aluminum vented metal soffit c/w edge moulding	59	m2	5.87	346	10.08	595	15.95	941
SUBTOTAL/SIDING	9.14	/M2 GFA		10,248		6,732		16,980
5:ROOFING/SHEET METAL								
5.10 Built-up asphalt roofing completed with mineral granular and flashing	527	m2	21.50	11,331	18.00	9,486	39.50	20,817
5.30 R.S.I. 6 (R34) batt insulation in joist space	527	m2	1.56	822	5.83	3,072	7.39	3,895
5.40 .102 mm polyethylene vapour barrier	580	m2	0.30	174	0.14	81	0.44	255
SUBTOTAL/ROOFING/SHEET METAL	13.44	/M2 GFA		12,327		12,640		24,966
6:CARPENTRY - ROUGH								
6.10 Material only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (2-38 x 235 mm) - spruce	38	MFBM	0.00	0	632.00	24,016	632.00	24,016

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
6.20 Material only	44	MFBM	0.00		0	471.00	20,724	471.00 20,724
No. 2 grade fir or spruce as below								
framing (38 x 140 mm) - fir								
plate (38 x 140 mm) - fir								
cross bridging (38 x 38 mm) - spruce								
framing (38 x 89 mm) - spruce								
framing (38 x 140 mm) - spruce								
blocking (38 x 89 mm) - spruce								
blocking (38 x 140 mm) - spruce								
wall strapping (38 x 38 mm) - spruce								
fascia (19 x 140 mm) - spruce								
6.30 Material only - Sheathing	4,051	m2	0.00		0	6.51	26,372	6.51 26,372
19 mm plywood - floor underlay	1432	m2						
13 mm tentest - u/s of joist	1368	m2						
10 mm plywood - roof sheathing	524	m2						
8 mm plywood - wall sheathing	727	m2						
6.40 Labour only - complete framing	1,857	m2	23.79	44,178	0.00	0	23.79	44,178
including installation of windows								
6.50 90 x 238 mm wide R.S.I. 2.1 (R12)	99	m	0.41	41	0.53	52	0.94	93
batt insulation (vertical eaves)								
SUBTOTAL/CARPENTRY - ROUGH	62.13	/M2 GFA		44,219		71,164		115,383

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
7:CARPENTRY - FINISH								
7.10 Stair - 6 flights @ (2x6x7 = 84 risers)	2	No	430.00	860	369.00	738	799.00	1,598
38 x 300 mm stringers - 59 m								
38 x 235 mm treads - 103 m								
6 x 275 mm fir plywood in risers - 105 m								
7.30 Select grade fir in window and door	3,314	m	0.75	2,486	1.04	3,447	1.79	5,932
trim, base; 40 x 12 mm								
- window 431 m								
- door 555 m								
- base 2328 m								
= TOTAL 3314 m								
SUBTOTAL/CARPENTRY - FINISH	4.05	/M2 GFA		3,346		4,185		7,530
8:WINDOWS AND GLAZING								
8.10 Double-glazed patio door in wood	18	No	0.00	0	863.00	15,534	863.00	15,534
frame with aluminum cladding, (size 2.4 x 1.8 m), including hardware								
8.20 Double-glazed sealed window in	4	No	0.00	0	839.00	3,356	839.00	3,356
steel frame, with wired glass (size 2.4 x 2.55 m)								

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
8.30 Double-glazed sliding units in wood frame (size 2.4 x .9 m), aluminum sliders, screen, incl. hardware	6	No	0.00	0	239.00	1,434	239.00	1,434
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m), aluminum sliders, screen, incl. hardware	28	No	0.00	0	160.00	4,480	160.00	4,480
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m), aluminum sliders, screen, incl. hardware	3	No	0.00	0	130.00	390	130.00	390
SUBTOTAL/WINDOWS AND GLAZING	13.57	/M2 GFA		0		25,194		25,194
9:SEALANTS								
9.10 Caulk - exterior (exterior doors, windows, junction of siding and concrete)	725	m	0.38	276	0.25	181	0.63	457
9.20 Caulk - interior (ceramic tile)	227	m	1.04	236	0.55	125	1.59	361
SUBTOTAL/SEALANTS	0.44	/M2 GFA		512		306		818
10:DOORS								
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold	3	No	244.00	732	1,537.00	4,611	1,781.00	5,343

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.06 Fire Rated door and side light with 0.9 x 0.21 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8	No	190.00	1,520	1,146.00	9,168	1,336.00	10,688
10.09 Solid core door and frame, rotary cut mahogany - 25 No. .9x2.1m x 44mm (20 min label) - 26 No. .85 x 2.1 m x 44 mm = 51 No. TOTAL	51	No	25.00	1,275	186.00	9,486	211.00	10,761
10.20 Hollow core door and frame rotary cut mahogany face - 24 No. .7 x 2. m x 35 mm - 24 No. .75 x 2. m x 35 mm = 48 No. TOTAL	48	No	12.50	600	38.99	1,872	51.49	2,472
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1	No.	25.00	25	216.00	216	241.00	241

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.30 Metal Folding Bi-fold doors, with tracks and pulls	78	No.	12.75	995	124.00	9,672	136.75	10,667
- 28 No. 1.8 x 2. m								
- 14 No. 1.5 x 2. m								
- 6 No. 1.2 x 2. m								
- 14 No. .9 x 2. m								
- 16 No. .6 x 2. m								
= 78 No. TOTAL								
SUBTOTAL/DOORS	21.63	/M2 GFA		5,147		35,025		40,171
11:HARDWARE								
11.15 Lock sets to interior doors	25	set	12.00	300	23.99	600	35.99	900
11.25 Butts to interior doors (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets	81	set	8.00	648	9.99	809	17.99	1,457
11.40 Bathroom privacy latch sets	24	set	8.00	192	11.99	288	19.99	480
11.50 Door closers (rated)	11	No	14.00	154	27.50	303	41.50	457
SUBTOTAL/HARDWARE	1.77	/M2 GFA		1,294		1,999		3,293
12:CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm, thinset on drywall	137	m2	25.00	3,425	17.62	2,414	42.62	5,839
SUBTOTAL/CERAMIC TILING	3.14	/M2 GFA		3,425		2,414		5,839

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		LABOUR		LABOUR		MAT/EQUIP		MAT/EQUIP		TOTAL		TOTAL
		QUANTITY	UNIT	UNIT	RATE	ITEM	COST	UNIT	RATE	ITEM	COST	COST
13:WALLBOARD												
13.10	Gypsum wallboard, taped and sanded 13 mm standard on walls	3,945	m2	2.50		9,863		2.02		7,969		4.52 17,831
13.13	Gypsum wallboard, taped and sanded 13 mm fire retardant	695	m2	2.75		1,911		2.55		1,772		5.30 3,684
	- walls 666 m2											
	- stair soffit 29 m2											
	= TOTAL 695 m2											
13.14	Gypsum wallboard, taped and sanded 15.9 mm thick	487	m2	2.75		1,339		3.14		1,529		5.89 2,868
13.15	Gypsum wallboard, taped and sanded 15.9 fire retardant shaft enclosure	63	m2	4.75		299		3.34		210		8.09 510
13.16	Gypsum wallboard, taped and sanded 15.9 mm fire retardant with sound bar on ceiling	1,887	m2	3.75		7,076		3.54		6,680		7.29 13,756
13.17	2 layers gypsum wallboard, taped and sanded, 15.9 mm fire retardant with sound bar on ceiling	4	m2	5.68		23		7.31		29		12.99 52
13.30	Tentest board, Crane 3-183 Redcliffe	524	m2	4.06		2,127		2.42		1,268		6.48 3,396
13.40	Finish to ceilings - textured	1,425	m2	1.17		1,667		1.11		1,582		2.28 3,249

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
13.70 Vapour barrier, .102 mm polyethylene	1,346	m2	0.30	404	0.14	188	0.44	592
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls	728	m2	0.78	568	3.55	2,584	4.33	3,152
13.86 Batt insulation RSI - 3.5 (R20) to interior walls	908	m2	0.78	708	3.55	3,223	4.33	3,932
SUBTOTAL/WALLBOARD	28.55	/M2 GFA		25,986		27,036		53,022
14:FLOORING								
14.10 Sheet vinyl flooring. .065 gauge with adhesive to subfloor	364	m2	5.75	2,093	10.75	3,913	16.50	6,006
14.20 Carpet, 20 oz. 100% Nylon 13 mm thick chip foam underlay	1,296	m2	3.25	4,212	14.44	18,714	17.69	22,926
14.30 'Neoprene Hypalon' waterproofing or equal to balcony	67	m2	16.00	1,072	21.00	1,407	37.00	2,479
14.40 Gypcrete floor topping including steel trowel finish	1,338	m2	7.00	9,366	3.50	4,683	10.50	14,049
SUBTOTAL/FLOORING	24.48	/M2 GFA		16,743		28,717		45,460
15:PAINTING								
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy	26	m2	4.85	126	1.15	30	6.00	156

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
15.14 Prepare, prime, two coats enamel on metal railing and balustrade	783	m	1.27	994	0.91	713	2.18	1,707
15.22 Interior work - Prepare, 1 coat primer sealer, 1 coat latex or semigloss paint on drywall - walls 4962 m2 - ceiling 234 m2 = TOTAL 5196 m2	5,196	m2	2.00	10,392	0.65	3,377	2.65	13,769
15.30 Two coats urethane varnish on doors and frames	105	No	25.00	2,625	5.70	599	30.70	3,224
15.40 Prepare, prime, one coat semigloss on base	2,328	m	0.60	1,397	0.14	326	0.74	1,723
15.50 Prepare, prime, one coat semigloss on shelving	94	m2	1.96	184	0.34	32	2.30	216
SUBTOTAL/PAINTING	11.20	/M2 GFA		15,719		5,076		20,795
16:FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	3.26	349	4.46	477	7.72	826

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
16.20 Vanity and cabinets, plastic laminated top to lower cabinets, drawers, shelves etc.	195	m	30.00	5,850	180.00	35,100	210.00	40,950
- Lower vanity and cupboard	27	m						
- Wall units	99	m						
- Worktop unit	69	m						
= TOTAL	195	m						
SUBTOTAL/FITTINGS	22.50	/M2 GFA		6,199		35,577		41,776
17:SPECIALTIES								
17.10 Washroom accessories	96	No	5.50	528	8.50	816	14.00	1,344
- 24 No. toilet paper holders								
- 24 No. soap dishes								
- 48 No. towel bars								
= 96 No. TOTAL								
17.20 Medicine cabinet	24	No	11.00	264	39.00	936	50.00	1,200
17.30 25 mm dia. shower curtain rod, chrome	24	No	6.00	144	7.00	168	13.00	312
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts	1	set	58.00	58	370.00	370	428.00	428
17.50 Coat rods, chrome, 18 mm dia.	24	No	4.00	96	6.00	144	10.00	240
17.60 Drapery tracks	102	m	3.75	383	9.00	918	12.75	1,301

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
17.70 970 mm high metal railing c/w balusters 100 mm o.c. max to balconies	98	m	11.00	1,078	43.00	4,214	54.00	5,292
17.80 Metal railing and balusters with vinyl cap	66	m	11.00	726	38.00	2,508	49.00	3,234
17.90 Handrail: 50 mm dia. pipe & brackets	54	m	25.00	1,350	44.00	2,376	69.00	3,726
SUBTOTAL/SPECIALTIES	9.20	/M2 GFA		4,627		12,450		17,077
18:APPLIANCES								
18.10 Range, freestanding, 760 mm (30") top 4 surface elements, oven auto timer	24	No	17.00	408	495.00	11,880	512.00	12,288
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24	No	17.00	408	469.00	11,256	486.00	11,664
18.30 Range hood	24	No	17.00	408	103.00	2,472	120.00	2,880
18.40 Coin operated dryer	2	No	17.00	34	581.00	1,162	598.00	1,196
18.50 Coin operated washer	2	No	17.00	34	753.00	1,506	770.00	1,540
SUBTOTAL/APPLIANCES	15.92	/M2 GFA		1,292		28,276		29,568

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
19:PLUMBING								
19.10 Complete plumbing, including:	24	apt	675.00	16,200	1,570.00	37,680	2,245.00	53,880
- 24 No. water closets								
- 32 No. lavatory basins								
- 24 No. baths, 5'								
- 1 No. mop service basin								
- 1 No. laundry tub								
(the above Crane or equal)								
- 24 No. kitchen sinks, compartment,								
stainless steel								
- 1 No. water heater and storage								
tank, cap. 300 MBH								
- 1 No. domestic hot water recircula-								
ting pump and accessories								
- rough-in, waste and vent								
- roof drains								
SUBTOTAL/PLUMBING	29.01	/M2 GFA		16,200		37,680		53,880
20:HEATING								
20.10 Hot water circulation system	24	apt	446.00	10,704	1,049.00	25,176	1,495.00	35,880
(268 m total length) with radiators,								
24 control valves, one centrifugal								
circulation pump, complete with all								
pipng, 50 gallon expansion tank,								
hot water heating boiler and gas								
supply system.								
SUBTOTAL/HEATING	19.32	/M2 GFA		10,704		25,176		35,880

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
21:VENTILATION								
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans	24	apt	90.00	2,160	265.00	6,360	355.00	8,520
SUBTOTAL/VENTILATION	4.59	/M2 GFA		2,160		6,360		8,520
22:FIRE PROTECTION								
22.10 Fire protection system, complete for 24-unit apartment building	24	apt	35.00	840	68.00	1,632	103.00	2,472
SUBTOTAL/FIRE PROTECTION	1.33	/M2 GFA		840		1,632		2,472
23:ELECTRICAL								
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and power outlets for TV, phone and razor; vent fan, door- bell with two presses, 100 A service board and fire alarm system (includes \$200 per apartment for electrical fixtures)	24	apt	867.00	20,808	1,191.00	28,584	2,058.00	49,392
SUBTOTAL/ELECTRICAL	26.60	/M2 GFA		20,808		28,584		49,392

WALK - UP APARTMENT

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
24:SITE OVERHEADS								
24.10 Site overheads	24	apt	1,335.00	32,040	665.00	15,960	2,000.00	48,000
- setup								
- supervision								
- plant								
- site office								
- small tools								
- security								
- boarding, etc.								
SUBTOTAL/SITE OVERHEADS	25.85	/M2 GFA		32,040		15,960		48,000
25:GENERAL CONTRACTOR'S OVERHEADS & PROFIT								
25.10 General Contractor's Overhead & Profit	24	apt	665.00	15,960	335.00	8,040	1,000.00	24,000
- permits								
- bonds								
- insurance								
- office overhead								
- profit								
SUBTOTAL/GENERAL CONTRACTOR'S OVHD & PROFIT	12.92	/M2 GFA		15,960		8,040		24,000
TOTAL / GRANDE PRAIRIE	\$374.52	/M2 GFA		\$256,595		\$438,884		\$ 695,480

DETAILED COST ESTIMATES FOR HINTON

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
1:EXCAVATION								
1.10 Excavate for basement, wall footings and bases	891	m3	0.47	419	0.95	846	1.42	1,265
1.20 Backfill to basement walls, footings and bases	188	m3	0.42	79	0.86	162	1.28	241
1.30 150 mm gravel or sand bed under slab on grade	70	m3	3.30	231	6.50	455	9.80	686
1.40 Vapour barrier .152 mm polyethylene on gravel or sand bed	501	m2	0.82	411	0.23	115	1.05	526
SUBTOTAL/EXCAVATION	1.46	/M2 GFA		1,140		1,578		2,718
2:CONCRETE								
2.10 Concrete (25 MPa) in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced conc. footing	58	m3	0.00	0	106.97	6,204	106.97	6,204
2.20 Reinforcing steel in footings and basement walls (material only)	1,652	kg	0.00	0	0.65	1,074	0.65	1,074
2.30 Form, place rebar and pour concrete in footing (560 x 250 mm) (subcontract)	222	m	5.75	1,277	3.45	766	9.20	2,042

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
2.35 Form, place rebar and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	16.56	1,590	10.80	1,037	27.36	2,627
2.40 90 mm concrete (20 MPa) in slab on grade	456	m2	3.80	1,733	8.92	4,068	12.72	5,800
2.45 150 x 150 mm welded wire mesh reinforcement to slab on grade (material only)	456	m2	0.00	0	3.11	1,418	3.11	1,418
2.55 38 mm thick rigid insulation to concrete wall (basement)	117	m2	1.93	226	3.55	415	5.48	641
2.60 Parging to concrete walls	29	m2	8.91	258	2.92	85	11.83	343
SUBTOTAL/CONCRETE	10.85	/M2 GFA		5,083		15,066		20,150
3:DAMPPOOFING								
3.10 Two coats asphaltic emulsion on concrete walls	159	m2	0.28	45	0.28	45	0.56	89
3.20 100 mm perforated plastic weeping tile in crushed gravel surround	96	m	4.40	422	3.80	365	8.20	787
SUBTOTAL/DAMPPOOFING	0.47	/M2 GFA		467		409		876
4:SIDING								
4.10 Prefinished aluminum siding	98	m2	4.57	448	13.00	1,274	17.57	1,722

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
4.40 Stained dark-brown cedar siding 25 x 150 mm channel to column	700	FBM	0.71	497	1.01	707	1.72	1,204
4.50 Stucco on wire mesh on building paper	678	m2	12.80	8,678	6.44	4,366	19.24	13,045
4.60 24 ga. aluminum vented metal soffit c/w edge moulding	59	m2	4.20	248	10.57	624	14.77	871
SUBTOTAL/SIDING	9.07	/M2 GFA		9,871		6,971		16,842
5:ROOFING/SHEET METAL								
5.10 Built-up asphalt roofing completed with mineral granular and flashing	527	m2	19.50	10,277	20.00	10,540	39.50	20,817
5.30 R.S.I. 6 (R34) batt insulation in joist space	527	m2	1.52	801	5.83	3,072	7.35	3,873
5.40 .102 mm polyethylene vapour barrier	580	m2	0.25	145	0.13	75	0.38	220
SUBTOTAL/ROOFING/SHEET METAL	13.41	/M2 GFA		11,223		13,688		24,910
6:CARPENTRY - ROUGH								
6.10 Material only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (2-38 x 235 mm) - spruce	38	MFBM	0.00	0	603.00	22,914	603.00	22,914

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

				LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM	COST	UNIT RATE	ITEM COST	UNIT RATE	COST
6.20 Material only	44	MFBM	0.00	0	450.00	19,800	450.00	19,800	
No. 2 grade fir or spruce as below									
framing (38 x 140 mm) - fir									
plate (38 x 140 mm) - fir									
cross bridging (38 x 38 mm) - spruce									
framing (38 x 89 mm) - spruce									
framing (38 x 140 mm) - spruce									
blocking (38 x 89 mm) - spruce									
blocking (38 x 140 mm) - spruce									
wall strapping (38 x 38 mm) - spruce									
fascia (19 x 140 mm) - spruce									
6.30 Material only - Sheathing	4,051	m2	0.00	0	6.00	24,306	6.00	24,306	
19 mm plywood - floor underlay	1432	m2							
13 mm tentest - u/s of joist	1368	m2							
10 mm plywood - roof sheathing	524	m2							
8 mm plywood - wall sheathing	727	m2							
6.40 Labour only - complete framing	1,857	m2	23.37	43,398	0.00	0	23.37	43,398	
including installation of									
windows									
6.50 90 x 238 mm wide R.S.I. 2.1 (R12)	99	m	0.39	39	0.58	57	0.97	96	
batt insulation (vertical eaves)									
SUBTOTAL/CARPENTRY - ROUGH	59.51	/M2 GFA		43,437		67,077		110,514	

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
7:CARPENTRY - FINISH								
7.10 Stair - 6 flights @ (2x6x7 = 84 risers)	2	No	530.00	1,060	345.00	690	875.00	1,750
38 x 300 mm stringers - 59 m								
38 x 235 mm treads - 103 m								
6 x 275 mm fir plywood in risers - 105 m								
7.30 Select grade fir in window and door	3,314	m	0.74	2,452	1.02	3,380	1.76	5,833
trim, base; 40 x 12 mm								
- window 431 m								
- door 555 m								
- base 2328 m								
= TOTAL 3314 m								
SUBTOTAL/CARPENTRY - FINISH	4.08	/M2 GFA		3,512		4,070		7,583
8:WINDOWS AND GLAZING								
8.10 Double-glazed patio door in wood	18	No	0.00	0	863.00	15,534	863.00	15,534
frame with aluminum cladding,								
(size 2.4 x 1.8 m), including								
hardware								
8.20 Double-glazed sealed window in	4	No	0.00	0	816.00	3,264	816.00	3,264
steel frame, with wired glass								
(size 2.4 x 2.55 m)								

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
8.30 Double-glazed sliding units in wood frame (size 2.4 x .9 m), aluminum sliders, screen, incl. hardware	6	No	0.00	0	231.00	1,386	231.00	1,386
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m), aluminum sliders, screen, incl. hardware	28	No	0.00	0	156.00	4,368	156.00	4,368
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m), aluminum sliders, screen, incl. hardware	3	No	0.00	0	127.00	381	127.00	381
SUBTOTAL/WINDOWS AND GLAZING	13.43	/M2 GFA		0		24,933		24,933
9:SEALANTS								
9.10 Caulk - exterior (exterior doors, windows, junction of siding and concrete)	725	m	0.37	268	0.24	174	0.61	442
9.20 Caulk - interior (ceramic tile)	227	m	1.02	232	0.54	123	1.56	354
SUBTOTAL/SEALANTS	0.43	/M2 GFA		500		297		796
10:DOORS								
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold	3	No	244.00	732	1,537.00	4,611	1,781.00	5,343

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.06 Fire Rated door and side light with 0.9 x 0.21 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8	No	190.00	1,520	1,146.00	9,168	1,336.00	10,688
10.09 Solid core door and frame, rotary cut mahogany - 25 No. .9x2.1mx44mm (20 min label) - 26 No. .85 x 2.1 m x 44 mm = 51 No. TOTAL	51	No	22.00	1,122	185.00	9,435	207.00	10,557
10.20 Hollow core door and frame rotary cut mahogany face - 24 No. .7 x 2. m x 35 mm - 24 No. .75 x 2. m x 35 mm = 48 No. TOTAL	48	No	12.00	576	39.95	1,918	51.95	2,494
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1	No.	22.00	22	215.00	215	237.00	237

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.30 Metal Folding Bi-fold doors, with tracks and pulls	78	No.	12.50	975	124.00	9,672	136.50	10,647
- 28 No. 1.8 x 2. m								
- 14 No. 1.5 x 2. m								
- 6 No. 1.2 x 2. m								
- 14 No. .9 x 2. m								
- 16 No. .6 x 2. m								
= 78 No. TOTAL								
SUBTOTAL/DOORS	21.52	/M2 GFA		4,947		35,019		39,966
11:HARDWARE								
11.15 Lock sets to interior doors	25	set	11.00	275	22.99	575	33.99	850
11.25 Butts to interior doors (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets	81	set	7.35	595	9.99	809	17.34	1,405
11.40 Bathroom privacy latch sets	24	set	7.35	176	11.99	288	19.34	464
11.50 Door closers (rated)	11	No	13.00	143	27.00	297	40.00	440
SUBTOTAL/HARDWARE	1.70	/M2 GFA		1,190		1,969		3,158
12:CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm, thinset on drywall	137	m2	24.00	3,288	16.89	2,314	40.89	5,602
SUBTOTAL/CERAMIC TILING	3.02	/M2 GFA		3,288		2,314		5,602

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
13:WALLBOARD								
13.10 Gypsum wallboard, taped and sanded 13 mm standard on walls	3,945	m2	2.90	11,441	1.79	7,062	4.69	18,502
13.13 Gypsum wallboard, taped and sanded 13 mm fire retardant - walls 666 m2 - stair soffit 29 m2 = TOTAL 695 m2	695	m2	3.19	2,217	2.26	1,571	5.45	3,788
13.14 Gypsum wallboard, taped and sanded 15.9 mm thick	487	m2	3.19	1,554	2.78	1,354	5.97	2,907
13.15 Gypsum wallboard, taped and sanded 15.9 fire retardant shaft enclosure	63	m2	5.19	327	2.98	188	8.17	515
13.16 Gypsum wallboard, taped and sanded 15.9 mm fire retardant with sound bar on ceiling	1,887	m2	4.19	7,907	3.18	6,001	7.37	13,907
13.17 2 layers gypsum wallboard, taped and sanded, 15.9 mm fire retardant with sound bar on ceiling	4	m2	6.58	26	6.48	26	13.06	52
13.30 Tentest board, Crane 3-183 Redcliffe	524	m2	4.30	2,253	2.23	1,169	6.53	3,422
13.40 Finish to ceilings - textured	1,425	m2	1.17	1,667	1.11	1,582	2.28	3,249

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
13.70 Vapour barrier, .102 mm polyethylene	1,346	m2	0.25	337	0.13	175	0.38	511
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls	728	m2	0.76	553	3.55	2,584	4.31	3,138
13.86 Batt insulation RSI - 3.5 (R20) to interior walls	908	m2	0.76	690	3.55	3,223	4.31	3,913
SUBTOTAL/WALLBOARD	29.03	/M2 GFA		28,971		24,933		53,905
14:FLOORING								
14.10 Sheet vinyl flooring. .065 gauge with adhesive to subfloor	364	m2	5.50	2,002	10.50	3,822	16.00	5,824
14.20 Carpet, 20 oz. 100% Nylon 13 mm thick chip foam underlay	1,296	m2	3.25	4,212	13.91	18,027	17.16	22,239
14.30 'Neoprene Hypalon' waterproofing or equal to balcony	67	m2	17.00	1,139	22.50	1,508	39.50	2,647
14.40 Gypcrete floor topping including steel trowel finish	1,338	m2	7.50	10,035	3.70	4,951	11.20	14,986
SUBTOTAL/FLOORING	24.61	/M2 GFA		17,388		28,307		45,695
15:PAINTING								
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy	26	m2	4.60	120	1.13	29	5.73	149

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
15.14 Prepare, prime, two coats enamel on metal railing and balustrade	783	m	1.48	1,159	0.89	697	2.37	1,856
15.22 Interior work - Prepare, 1 coat primer sealer, 1 coat latex or semigloss paint on drywall - walls 4962 m2 - ceiling 234 m2 = TOTAL 5196 m2	5,196	m2	2.16	11,223	0.65	3,377	2.81	14,601
15.30 Two coats urethane varnish on doors and frames	105	No	25.00	2,625	5.60	588	30.60	3,213
15.40 Prepare, prime, one coat semigloss on base	2,328	m	0.69	1,606	0.14	326	0.83	1,932
15.50 Prepare, prime, one coat semigloss on shelving	94	m2	2.27	213	0.43	40	2.70	254
SUBTOTAL/PAINTING	11.85	/M2 GFA		16,947		5,058		22,004
16:FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	3.24	347	4.22	452	7.46	798

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
16.20 Vanity and cabinets, plastic laminated top to lower cabinets, drawers, shelves etc.	195	m	28.00	5,460	167.00	32,565	195.00	38,025
- Lower vanity and cupboard	27	m						
- Wall units	99	m						
- Worktop unit	69	m						
= TOTAL	195	m						
SUBTOTAL/FITTINGS	20.91	/M2 GFA		5,807		33,017		38,823
17:SPECIALTIES								
17.10 Washroom accessories	96	No	5.00	480	8.00	768	13.00	1,248
- 24 No. toilet paper holders								
- 24 No. soap dishes								
- 48 No. towel bars								
= 96 No. TOTAL								
17.20 Medicine cabinet	24	No	10.00	240	35.00	840	45.00	1,080
17.30 25 mm dia. shower curtain rod, chrome	24	No	6.00	144	7.00	168	13.00	312
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts	1	set	57.00	57	365.00	365	422.00	422
17.50 Coat rods, chrome, 18 mm dia.	24	No	3.00	72	5.00	120	8.00	192
17.60 Drapery tracks	102	m	3.50	357	8.50	867	12.00	1,224

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
17.70 970 mm high metal railing c/w balusters 100 mm o.c. max to balconies	98	m	11.00	1,078	42.00	4,116	53.00	5,194
17.80 Metal railing and balusters with vinyl cap	66	m	11.00	726	37.00	2,442	48.00	3,168
17.90 Handrail: 50 mm dia. pipe & brackets	54	m	24.00	1,296	43.00	2,322	67.00	3,618
SUBTOTAL/SPECIALTIES	8.86	/M2 GFA		4,450		12,008		16,458
18:APPLIANCES								
18.10 Range, freestanding, 760 mm (30") top 4 surface elements, oven auto timer	24	No	16.00	384	488.00	11,712	504.00	12,096
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24	No	16.00	384	462.00	11,088	478.00	11,472
18.30 Range hood	24	No	16.00	384	91.00	2,184	107.00	2,568
18.40 Coin operated dryer	2	No	16.00	32	575.00	1,150	591.00	1,182
18.50 Coin operated washer	2	No	16.00	32	745.00	1,490	761.00	1,522
SUBTOTAL/APPLIANCES	15.53	/M2 GFA		1,216		27,624		28,840

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
19:PLUMBING								
19.10 Complete plumbing, including:	24	apt	730.00	17,520	1,625.00	39,000	2,355.00	56,520
- 24 No. water closets								
- 32 No. lavatory basins								
- 24 No. baths, 5'								
- 1 No. mop service basin								
- 1 No. laundry tub								
(the above Crane or equal)								
- 24 No. kitchen sinks, compartment, stainless steel								
- 1 No. water heater and storage tank, cap. 300 MBH								
- 1 No. domestic hot water recirculating pump and accessories								
- rough-in, waste and vent								
- roof drains								
SUBTOTAL/PLUMBING	30.44	/M2 GFA		17,520		39,000		56,520
20:HEATING								
20.10 Hot water circulation system (268 m total length) with radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24	apt	441.00	10,584	1,067.00	25,608	1,508.00	36,192
SUBTOTAL/HEATING	19.49	/M2 GFA		10,584		25,608		36,192

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
21:VENTILATION								
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans	24	apt	90.00	2,160	265.00	6,360	355.00	8,520
SUBTOTAL/VENTILATION	4.59	/M2 GFA		2,160		6,360		8,520
22:FIRE PROTECTION								
22.10 Fire protection system, complete for 24-unit apartment building	24	apt	35.00	840	68.00	1,632	103.00	2,472
SUBTOTAL/FIRE PROTECTION	1.33	/M2 GFA		840		1,632		2,472
23:ELECTRICAL								
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and power outlets for TV, phone and razor; vent fan, door- bell with two presses, 100 A service board and fire alarm system (includes \$200 per apartment for electrical fixtures)	24	apt	867.00	20,808	1,260.00	30,240	2,127.00	51,048
SUBTOTAL/ELECTRICAL	27.49	/M2 GFA		20,808		30,240		51,048

WALK - UP APARTMENT

HINTON

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
24:SITE OVERHEADS								
24.10 Site overheads	24	apt	1,335.00	32,040	665.00	15,960	2,000.00	48,000
- setup								
- supervision								
- plant								
- site office								
- small tools								
- security								
- boarding, etc.								
SUBTOTAL/SITE OVERHEADS	25.85	/M2 GFA		32,040		15,960		48,000
25:GENERAL CONTRACTOR'S OVERHEADS & PROFIT								
25.10 General Contractor's Overhead & Profit	24	apt	665.00	15,960	335.00	8,040	1,000.00	24,000
- permits								
- bonds								
- insurance								
- office overhead								
- profit								
SUBTOTAL/GENERAL CONTRACTOR'S OVHD & PROFIT	12.92	/M2 GFA		15,960		8,040		24,000
TOTAL / HINTON	\$371.85	/M2 GFA		\$259,347		\$431,179		\$ 690,526

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
1:EXCAVATION								
1.10 Excavate for basement, wall footings and bases	891	m3	0.40	356	1.40	1,247	1.80	1,604
1.20 Backfill to basement walls, footings and bases	188	m3	0.36	68	1.26	237	1.62	305
1.30 150 mm gravel or sand bed under slab on grade	70	m3	3.00	210	12.00	840	15.00	1,050
1.40 Vapour barrier .152 mm polyethylene on gravel or sand bed	501	m2	0.81	406	0.22	110	1.03	516
SUBTOTAL/EXCAVATION	1.87	/M2 GFA		1,040		2,435		3,474
2:CONCRETE								
2.10 Concrete (25 MPa) in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced conc. footing	58	m3	0.00	0	77.66	4,504	77.66	4,504
2.20 Reinforcing steel in footings and basement walls (material only)	1,652	kg	0.00	0	0.61	1,008	0.61	1,008
2.30 Form, place rebar and pour concrete in footing (560 x 250 mm) (subcontract)	222	m	5.25	1,166	1.88	417	7.13	1,583

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
2.35 Form, place rebar and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	15.12	1,452	5.87	564	20.99	2,015
2.40 90 mm concrete (20 MPa) in slab on grade	456	m2	3.47	1,582	6.47	2,950	9.94	4,533
2.45 150 x 150 mm welded wire mesh reinforcement to slab on grade (material only)	456	m2	0.00	0	2.92	1,332	2.92	1,332
2.55 38 mm thick rigid insulation to concrete wall (basement)	117	m2	1.90	222	3.55	415	5.45	638
2.60 Parging to concrete walls	29	m2	8.14	236	2.12	61	10.26	298
SUBTOTAL/CONCRETE	8.57	/M2 GFA		4,658		11,252		15,909
3:DAMPPOOFING								
3.10 Two coats asphaltic emulsion on concrete walls	159	m2	0.31	49	0.28	45	0.59	94
3.20 100 mm perforated plastic weeping tile in crushed gravel surround	96	m	4.40	422	3.80	365	8.20	787
SUBTOTAL/DAMPPOOFING	0.47	/M2 GFA		472		409		881
4:SIDING								
4.10 Prefinished aluminum siding	98	m2	4.95	485	12.50	1,225	17.45	1,710

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
4.40 Stained dark-brown cedar siding 25 x 150 mm channel to column	700	FBM	0.69	483	1.03	721	1.72	1,204
4.50 Stucco on wire mesh on building paper	678	m2	11.25	7,628	5.68	3,851	16.93	11,479
4.60 24 ga. aluminum vented metal soffit c/w edge moulding	59	m2	4.55	268	9.32	550	13.87	818
SUBTOTAL/SIDING	8.19	/M2 GFA		8,864		6,347		15,211
5:ROOFING/SHEET METAL								
5.10 Built-up asphalt roofing completed with mineral granular and flashing	527	m2	19.00	10,013	16.00	8,432	35.00	18,445
5.30 R.S.I. 6 (R34) batt insulation in joist space	527	m2	1.54	812	6.34	3,341	7.88	4,153
5.40 .102 mm polyethylene vapour barrier	580	m2	0.24	139	0.13	75	0.37	215
SUBTOTAL/ROOFING/SHEET METAL	12.28	/M2 GFA		10,964		11,849		22,812
6:CARPENTRY - ROUGH								
6.10 Material only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (2-38 x 235 mm) - spruce	38	MFBM	0.00	0	632.00	24,016	632.00	24,016

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
6.20 Material only	44	MFBM	0.00	0	471.00	20,724	471.00	20,724
No. 2 grade fir or spruce as below								
framing (38 x 140 mm) - fir								
plate (38 x 140 mm) - fir								
cross bridging (38 x 38 mm) - spruce								
framing (38 x 89 mm) - spruce								
framing (38 x 140 mm) - spruce								
blocking (38 x 89 mm) - spruce								
blocking (38 x 140 mm) - spruce								
wall strapping (38 x 38 mm) - spruce								
fascia (19 x 140 mm) - spruce								
6.30 Material only - Sheathing	4,051	m2	0.00	0	5.99	24,265	5.99	24,265
19 mm plywood - floor underlay	1432	m2						
13 mm plywood - u/s of joist	1368	m2						
10 mm plywood - roof sheathing	524	m2						
8 mm plywood - wall sheathing	727	m2						
6.40 Labour only - complete framing including installation of windows	1,857	m2	21.70	40,297	0.00	0	21.70	40,297
6.50 90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves)	99	m	0.39	39	0.57	56	0.96	95
SUBTOTAL/CARPENTRY - ROUGH	58.91	/M2 GFA		40,336		69,062		109,397

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
7:CARPENTRY - FINISH								
7.10 Stair - 6 flights @ (2x6x7 = 84 risers)	2	No	514.00	1,028	339.00	678	853.00	1,706
38 x 300 mm stringers - 59 m								
38 x 235 mm treads - 103 m								
6 x 275 mm fir plywood in risers - 105 m								
7.30 Select grade fir in window and door	3,314	m	0.68	2,254	1.01	3,347	1.69	5,601
trim, base; 40 x 12 mm								
- window 431 m								
- door 555 m								
- base 2328 m								
= TOTAL 3314 m								
SUBTOTAL/CARPENTRY - FINISH	3.93	/M2 GFA		3,282		4,025		7,307
8:WINDOWS AND GLAZING								
8.10 Double-glazed patio door in wood	18	No	0.00	0	865.00	15,570	865.00	15,570
frame with aluminum cladding,								
(size 2.4 x 1.8 m), including								
hardware								
8.20 Double-glazed sealed window in	4	No	0.00	0	816.00	3,264	816.00	3,264
steel frame, with wired glass								
(size 2.4 x 2.55 m)								

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
8.30 Double-glazed sliding units in wood frame (size 2.4 x .9 m), aluminum sliders, screen, incl. hardware	6	No	0.00	0	231.00	1,386	231.00	1,386
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m), aluminum sliders, screen, incl. hardware	28	No	0.00	0	156.00	4,368	156.00	4,368
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m), aluminum sliders, screen, incl. hardware	3	No	0.00	0	127.00	381	127.00	381
SUBTOTAL/WINDOWS AND GLAZING	13.45	/M2 GFA		0		24,969		24,969
9:SEALANTS								
9.10 Caulk - exterior (exterior doors, windows, junction of siding and concrete)	725	m	0.36	261	0.23	167	0.59	428
9.20 Caulk - interior (ceramic tile)	227	m	1.00	227	0.53	120	1.53	347
SUBTOTAL/SEALANTS	0.42	/M2 GFA		488		287		775
10:DOORS								
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold	3	No	244.00	732	1,578.00	4,734	1,822.00	5,466

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.06 Fire Rated door and side light with 0.9 x 0.21 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8	No	187.00	1,496	1,177.00	9,416	1,364.00	10,912
10.09 Solid core door and frame, rotary cut mahogany - 25 No. .9x2.1m x 44mm (20 min label) - 26 No. .85 x 2.1 m x 44 mm = 51 No. TOTAL	51	No	21.00	1,071	168.00	8,568	189.00	9,639
10.20 Hollow core door and frame rotary cut mahogany face - 24 No. .7 x 2. m x 35 mm - 24 No. .75 x 2. m x 35 mm = 48 No. TOTAL	48	No	11.50	552	38.99	1,872	50.49	2,424
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1	No.	21.00	21	197.00	197	218.00	218

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.30 Metal Folding Bi-fold doors, with tracks and pulls	78	No.	11.50	897	112.00	8,736	123.50	9,633
- 28 No. 1.8 x 2. m								
- 14 No. 1.5 x 2. m								
- 6 No. 1.2 x 2. m								
- 14 No. .9 x 2. m								
- 16 No. .6 x 2. m								
= 78 No. TOTAL								
SUBTOTAL/DOORS	20.62	/M2 GFA		4,769		33,523		38,292
11: HARDWARE								
11.15 Lock sets to interior doors	25	set	10.50	263	21.99	550	32.49	812
11.25 Butts to interior doors (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets	81	set	7.35	595	9.99	809	17.34	1,405
11.40 Bathroom privacy latch sets	24	set	7.35	176	11.99	288	19.34	464
11.50 Door closers (rated)	11	No	12.50	138	26.50	292	39.00	429
SUBTOTAL/HARDWARE	1.67	/M2 GFA		1,172		1,938		3,110
12: CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm, thinset on drywall	137	m2	19.60	2,685	22.00	3,014	41.60	5,699
SUBTOTAL/CERAMIC TILING	3.07	/M2 GFA		2,685		3,014		5,699

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
13:WALLBOARD								
13.10 Gypsum wallboard, taped and sanded 13 mm standard on walls	3,945	m2	2.25	8,876	1.78	7,022	4.03	15,898
13.13 Gypsum wallboard, taped and sanded 13 mm fire retardant - walls 666 m2 - stair soffit 29 m2 = TOTAL 695 m2	695	m2	2.48	1,724	2.24	1,557	4.72	3,280
13.14 Gypsum wallboard, taped and sanded 15.9 mm thick	487	m2	2.48	1,208	3.05	1,485	5.53	2,693
13.15 Gypsum wallboard, taped and sanded 15.9 fire retardant shaft enclosure	63	m2	4.48	282	3.25	205	7.73	487
13.16 Gypsum wallboard, taped and sanded 15.9 mm fire retardant with sound bar on ceiling	1,887	m2	3.48	6,567	3.45	6,510	6.93	13,077
13.17 2 layers gypsum wallboard, taped and sanded, 15.9 mm fire retardant with sound bar on ceiling	4	m2	5.11	20	6.44	26	11.55	46
13.30 Tentest board, Crane 3-183 Redcliffe	524	m2	3.69	1,934	2.22	1,163	5.91	3,097
13.40 Finish to ceilings - textured	1,425	m2	1.13	1,610	0.99	1,411	2.12	3,021

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
13.70 Vapour barrier, .102 mm polyethylene	1,346	m2	0.24	323	0.13	175	0.37	498
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls	728	m2	0.77	561	3.86	2,810	4.63	3,371
13.86 Batt insulation RSI - 3.5 (R20) to interior walls	908	m2	0.77	699	3.86	3,505	4.63	4,204
SUBTOTAL/WALLBOARD	26.75	/M2 GFA		23,804		25,869		49,673
14:FLOORING								
14.10 Sheet vinyl flooring. .065 gauge with adhesive to subfloor	364	m2	5.50	2,002	10.50	3,822	16.00	5,824
14.20 Carpet, 20 oz. 100% Nylon 13 mm thick chip foam underlay	1,296	m2	3.00	3,888	13.13	17,016	16.13	20,904
14.30 'Neoprene Hypalon' waterproofing or equal to balcony	67	m2	17.00	1,139	21.50	1,441	38.50	2,580
14.40 Gypcrete floor topping including steel trowel finish	1,338	m2	7.60	10,169	3.60	4,817	11.20	14,986
SUBTOTAL/FLOORING	23.85	/M2 GFA		17,198		27,096		44,294
15:PAINTING								
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy	26	m2	4.10	107	1.10	29	5.20	135

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
15.14 Prepare, prime, two coats enamel on metal railing and balustrade	783	m	1.36	1,065	0.80	626	2.16	1,691
15.22 Interior work - Prepare, 1 coat primer sealer, 1 coat latex or semigloss paint on drywall - walls 4962 m2 - ceiling 234 m2 = TOTAL 5196 m2	5,196	m2	2.16	11,223	0.65	3,377	2.81	14,601
15.30 Two coats urethane varnish on doors and frames	105	No	24.00	2,520	5.55	583	29.55	3,103
15.40 Prepare, prime, one coat semigloss on base	2,328	m	0.64	1,490	0.12	279	0.76	1,769
15.50 Prepare, prime, one coat semigloss on shelving	94	m2	2.10	197	0.40	38	2.50	235
SUBTOTAL/PAINTING	11.60	/M2 GFA		16,602		4,932		21,534
16:FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	3.24	347	4.15	444	7.39	791

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
16.20 Vanity and cabinets, plastic laminated top to lower cabinets, drawers, shelves etc.	195	m	28.00	5,460	180.00	35,100	208.00	40,560
- Lower vanity and cupboard	27	m						
- Wall units	99	m						
- Worktop unit	69	m						
= TOTAL	195	m						
SUBTOTAL/FITTINGS	22.27	/M2 GFA		5,807		35,544		41,351
17:SPECIALTIES								
17.10 Washroom accessories	96	No	5.00	480	7.50	720	12.50	1,200
- 24 No. toilet paper holders								
- 24 No. soap dishes								
- 48 No. towel bars								
= 96 No. TOTAL								
17.20 Medicine cabinet	24	No	10.00	240	34.00	816	44.00	1,056
17.30 25 mm dia. shower curtain rod, chrome	24	No	5.00	120	6.00	144	11.00	264
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts	1	set	56.00	56	360.00	360	416.00	416
17.50 Coat rods, chrome, 18 mm dia.	24	No	3.00	72	5.00	120	8.00	192
17.60 Drapery tracks	102	m	3.25	332	8.25	842	11.50	1,173



WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
17.70 970 mm high metal railing c/w balusters 100 mm o.c. max to balconies	98	m	11.00	1,078	41.00	4,018	52.00	5,096
17.80 Metal railing and balusters with vinyl cap	66	m	11.00	726	36.00	2,376	47.00	3,102
17.90 Handrail: 50 mm dia. pipe & brackets	54	m	23.00	1,242	42.00	2,268	65.00	3,510
SUBTOTAL/SPECIALTIES	8.62	/M2 GFA		4,346		11,664		16,009
18:APPLIANCES								
18.10 Range, freestanding, 760 mm (30") top 4 surface elements, oven auto timer	24	No	15.50	372	483.00	11,592	498.50	11,964
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24	No	15.50	372	458.00	10,992	473.50	11,364
18.30 Range hood	24	No	15.50	372	90.00	2,160	105.50	2,532
18.40 Coin operated dryer	2	No	15.50	31	569.00	1,138	584.50	1,169
18.50 Coin operated washer	2	No	15.50	31	737.00	1,474	752.50	1,505
SUBTOTAL/APPLIANCES	15.37	/M2 GFA		1,178		27,356		28,534

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
19:PLUMBING								
19.10 Complete plumbing, including:	24	apt	644.00	15,456	1,558.00	37,392	2,202.00	52,848
- 24 No. water closets								
- 32 No. lavatory basins								
- 24 No. baths, 5'								
- 1 No. mop service basin								
- 1 No. laundry tub								
(the above Crane or equal)								
- 24 No. kitchen sinks, compartment,								
stainless steel								
- 1 No. water heater and storage								
tank, cap. 300 MBH								
- 1 No. domestic hot water recircula-								
ting pump and accessories								
- rough-in, waste and vent								
- roof drains								
SUBTOTAL/PLUMBING	28.46	/M2 GFA		15,456		37,392		52,848
20:HEATING								
20.10 Hot water circulation system	24	apt	348.00	8,352	766.00	18,384	1,114.00	26,736
(268 m total length) with radiators,								
24 control valves, one centrifugal								
circulation pump, complete with all								
pipng, 50 gallon expansion tank,								
hot water heating boiler and gas								
supply system.								
SUBTOTAL/HEATING	14.40	/M2 GFA		8,352		18,384		26,736

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
21:VENTILATION								
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans	24	apt	84.00	2,016	243.00	5,832	327.00	7,848
SUBTOTAL/VENTILATION	4.23	/M2 GFA		2,016		5,832		7,848
22:FIRE PROTECTION								
22.10 Fire protection system, complete for 24-unit apartment building	24	apt	28.00	672	53.00	1,272	81.00	1,944
SUBTOTAL/FIRE PROTECTION	1.05	/M2 GFA		672		1,272		1,944
23:ELECTRICAL								
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and power outlets for TV, phone and razor; vent fan, door- bell with two presses, 100 A service board and fire alarm system (includes \$200 per apartment for electrical fixtures)	24	apt	719.00	17,256	970.00	23,280	1,689.00	40,536
SUBTOTAL/ELECTRICAL	21.83	/M2 GFA		17,256		23,280		40,536

WALK - UP APARTMENT

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
24:SITE OVERHEADS								
24.10 Site overheads	24	apt	1,335.00	32,040	665.00	15,960	2,000.00	48,000
- setup								
- supervision								
- plant								
- site office								
- small tools								
- security								
- boarding, etc.								
SUBTOTAL/SITE OVERHEADS	25.85	/M2 GFA		32,040		15,960		48,000
25:GENERAL CONTRACTOR'S OVERHEADS & PROFIT								
25.10 General Contractor's Overhead & Profit	24	apt	665.00	15,960	335.00	8,040	1,000.00	24,000
- permits								
- bonds								
- insurance								
- office overhead								
- profit								
SUBTOTAL/GENERAL CONTRACTOR'S OVHD & PROFIT	12.92	/M2 GFA		15,960		8,040		24,000
TOTAL / LETHBRIDGE	\$350.64	/M2 GFA		\$239,414		\$411,729		\$ 651,143

DETAILED COST ESTIMATES FOR MEDICINE HAT

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WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
1:EXCAVATION								
1.10 Excavate for basement, wall footings and bases	891	m3	0.55	490	0.93	829	1.48	1,319
1.20 Backfill to basement walls, footings and bases	188	m3	0.50	94	0.84	158	1.34	252
1.30 150 mm gravel or sand bed under slab on grade	70	m3	3.00	210	9.00	630	12.00	840
1.40 Vapour barrier .152 mm polyethylene on gravel or sand bed	501	m2	0.81	406	0.22	110	1.03	516
SUBTOTAL/EXCAVATION	1.58	/M2 GFA		1,200		1,727		2,927
2:CONCRETE								
2.10 Concrete (25 MPa) in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced conc. footing	58	m3	0.00	0	84.78	4,917	84.78	4,917
2.20 Reinforcing steel in footings and basement walls (material only)	1,652	kg	0.00	0	0.62	1,024	0.62	1,024
2.30 Form, place rebar and pour concrete in footing (560 x 250 mm) (subcontract)	222	m	5.50	1,221	2.11	468	7.61	1,689

WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
2.35 Form, place rebar and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	15.84	1,521	6.60	634	22.44	2,154
2.40 90 mm concrete (20 MPa) in slab on grade	456	m2	3.63	1,655	7.07	3,224	10.70	4,879
2.45 150 x 150 mm welded wire mesh reinforcement to slab on grade (material only)	456	m2	0.00	0	2.96	1,350	2.96	1,350
2.55 38 mm thick rigid insulation to concrete wall (basement)	117	m2	1.90	222	3.55	415	5.45	638
2.60 Parging to concrete walls	29	m2	8.53	247	2.31	67	10.84	314
SUBTOTAL/CONCRETE	9.14	/M2 GFA		4,867		12,100		16,966
3:DAMPPOOFING								
3.10 Two coats asphaltic emulsion on concrete walls	159	m2	0.31	49	0.28	45	0.59	94
3.20 100 mm perforated plastic weeping tile in crushed gravel surround	96	m	3.25	312	3.90	374	7.15	686
SUBTOTAL/DAMPPOOFING	0.42	/M2 GFA		361		419		780
4:SIDING								
4.10 Prefinished aluminum siding	98	m2	4.64	455	12.25	1,201	16.89	1,655

WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
4.40 Stained dark-brown cedar siding 25 x 150 mm channel to column	700	FBM	0.68	476	0.97	679	1.65	1,155
4.50 Stucco on wire mesh on building paper	678	m2	11.50	7,797	5.76	3,905	17.26	11,702
4.60 24 ga. aluminum vented metal soffit c/w edge moulding	59	m2	4.27	252	13.18	778	17.45	1,030
SUBTOTAL/SIDING	8.37	/M2 GFA		8,980		6,562		15,542
5:ROOFING/SHEET METAL								
5.10 Built-up asphalt roofing completed with mineral granular and flashing	527	m2	19.00	10,013	16.00	8,432	35.00	18,445
5.30 R.S.I. 6 (R34) batt insulation in joist space	527	m2	1.54	812	6.34	3,341	7.88	4,153
5.40 .102 mm polyethylene vapour barrier	580	m2	0.24	139	0.13	75	0.37	215
SUBTOTAL/ROOFING/SHEET METAL	12.28	/M2 GFA		10,964		11,849		22,812
6:CARPENTRY - ROUGH								
6.10 Material only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (2-38 x 235 mm) - spruce	38	MFBM	0.00	0	607.00	23,066	607.00	23,066

WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
6.20 Material only	44	MFBM	0.00	0	452.00	19,888	452.00	19,888
No. 2 grade fir or spruce as below								
framing (38 x 140 mm) - fir								
plate (38 x 140 mm) - fir								
cross bridging (38 x 38 mm) - spruce								
framing (38 x 89 mm) - spruce								
framing (38 x 140 mm) - spruce								
blocking (38 x 89 mm) - spruce								
blocking (38 x 140 mm) - spruce								
wall strapping (38 x 38 mm) - spruce								
fascia (19 x 140 mm) - spruce								
6.30 Material only - Sheathing	4,051	m2	0.00	0	6.20	25,116	6.20	25,116
19 mm plywood - floor underlay	1432	m2						
13 mm tentest - u/s of joist	1368	m2						
10 mm plywood - roof sheathing	524	m2						
8 mm plywood - wall sheathing	727	m2						
6.40 Labour only - complete framing including installation of windows	1,857	m2	23.10	42,897	0.00	0	23.10	42,897
6.50 90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves)	99	m	0.39	39	0.57	56	0.96	95
SUBTOTAL/CARPENTRY - ROUGH	59.81	/M2 GFA		42,935		68,127		111,062

WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
7:CARPENTRY - FINISH								
7.10 Stair - 6 flights @ (2x6x7 = 84 risers)	2	No	600.00	1,200	327.00	654	927.00	1,854
38 x 300 mm stringers - 59 m								
38 x 235 mm treads - 103 m								
6 x 275 mm fir plywood in risers - 105 m								
7.30 Select grade fir in window and door trim, base; 40 x 12 mm	3,314	m	0.70	2,320	1.01	3,347	1.71	5,667
- window 431 m								
- door 555 m								
- base 2328 m								
= TOTAL 3314 m								
SUBTOTAL/CARPENTRY - FINISH	4.05	/M2 GFA		3,520		4,001		7,521
8:WINDOWS AND GLAZING								
8.10 Double-glazed patio door in wood frame with aluminum cladding, (size 2.4 x 1.8 m), including hardware	18	No	0.00	0	865.00	15,570	865.00	15,570
8.20 Double-glazed sealed window in steel frame, with wired glass (size 2.4 x 2.55 m)	4	No	0.00	0	816.00	3,264	816.00	3,264



WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
8.30 Double-glazed sliding units in wood frame (size 2.4 x .9 m), aluminum sliders, screen, incl. hardware	6	No	0.00	0	231.00	1,386	231.00	1,386
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m), aluminum sliders, screen, incl. hardware	28	No	0.00	0	156.00	4,368	156.00	4,368
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m), aluminum sliders, screen, incl. hardware	3	No	0.00	0	127.00	381	127.00	381
SUBTOTAL/WINDOWS AND GLAZING	13.45	/M2 GFA		0		24,969		24,969
9:SEALANTS								
9.10 Caulk - exterior (exterior doors, windows, junction of siding and concrete)	725	m	0.36	261	0.23	167	0.59	428
9.20 Caulk - interior (ceramic tile)	227	m	1.00	227	0.53	120	1.53	347
SUBTOTAL/SEALANTS	0.42	/M2 GFA		488		287		775
10:DOORS								
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold	3	No	233.00	699	1,481.00	4,443	1,714.00	5,142



WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
10.06 Fire Rated door and side light with 0.9 x 0.21 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8	No	187.00	1,496	1,105.00	8,840	1,292.00	10,336
10.09 Solid core door and frame, rotary cut mahogany - 25 No. .9x2.1m x 44mm (20 min label) - 26 No. .85 x 2.1 m x 44 mm = 51 No. TOTAL	51	No	21.00	1,071	164.00	8,364	185.00	9,435
10.20 Hollow core door and frame rotary cut mahogany face - 24 No. .7 x 2. m x 35 mm - 24 No. .75 x 2. m x 35 mm = 48 No. TOTAL	48	No	11.50	552	37.88	1,818	49.38	2,370
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1	No.	21.00	21	193.00	193	214.00	214

WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.30 Metal Folding Bi-fold doors, with tracks and pulls	78	No.	11.50	897	112.00	8,736	123.50	9,633
- 28 No. 1.8 x 2. m								
- 14 No. 1.5 x 2. m								
- 6 No. 1.2 x 2. m								
- 14 No. .9 x 2. m								
- 16 No. .6 x 2. m								
= 78 No. TOTAL								
SUBTOTAL/DOORS	19.99	/M2 GFA		4,736		32,394		37,130
11: HARDWARE								
11.15 Lock sets to interior doors	25	set	10.50	263	21.99	550	32.49	812
11.25 Butts to interior doors (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets	81	set	7.35	595	9.99	809	17.34	1,405
11.40 Bathroom privacy latch sets	24	set	7.35	176	11.91	286	19.26	462
11.50 Door closers (rated)	11	No	12.00	132	26.50	292	38.50	424
SUBTOTAL/HARDWARE	1.67	/M2 GFA		1,166		1,936		3,103
12: CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm, thinset on drywall	137	m2	20.60	2,822	22.00	3,014	42.60	5,836
SUBTOTAL/CERAMIC TILING	3.14	/M2 GFA		2,822		3,014		5,836

WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		LABOUR		LABOUR		MAT/EQUIP		MAT/EQUIP		TOTAL	TOTAL
		QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
13:WALLBOARD											
13.10	Gypsum wallboard, taped and sanded 13 mm standard on walls	3,945	m2	2.25	8,876	1.67	6,588	3.92	15,464		
13.13	Gypsum wallboard, taped and sanded 13 mm fire retardant	695	m2	2.48	1,724	2.10	1,460	4.58	3,183		
	- walls	666	m2								
	- stair soffit	29	m2								
	= TOTAL	695	m2								
13.14	Gypsum wallboard, taped and sanded 15.9 mm thick	487	m2	2.48	1,208	2.58	1,256	5.06	2,464		
13.15	Gypsum wallboard, taped and sanded 15.9 fire retardant shaft enclosure	63	m2	4.48	282	2.78	175	7.26	457		
13.16	Gypsum wallboard, taped and sanded 15.9 mm fire retardant with sound bar on ceiling	1,887	m2	3.48	6,567	2.98	5,623	6.46	12,190		
13.17	2 layers gypsum wallboard, taped and sanded, 15.9 mm fire retardant with sound bar on ceiling	4	m2	5.11	20	6.05	24	11.16	45		
13.30	Tentest board, Crane 3-183 Redcliffe	524	m2	3.92	2,054	2.30	1,205	6.22	3,259		
13.40	Finish to ceilings - textured	1,425	m2	1.21	1,724	1.06	1,511	2.27	3,235		

WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
13.70 Vapour barrier, .102 mm polyethylene	1,346	m2	0.24	323	0.13	175	0.37	498
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls	728	m2	0.77	561	3.86	2,810	4.63	3,371
13.86 Batt insulation RSI - 3.5 (R20) to interior walls	908	m2	0.77	699	3.86	3,505	4.63	4,204
SUBTOTAL/WALLBOARD	26.05	/M2 GFA		24,038		24,332		48,370
14:FLOORING								
14.10 Sheet vinyl flooring. .065 gauge with adhesive to subfloor	364	m2	5.50	2,002	10.50	3,822	16.00	5,824
14.20 Carpet, 20 oz. 100% Nylon 13 mm thick chip foam underlay	1,296	m2	3.00	3,888	13.13	17,016	16.13	20,904
14.30 'Neoprene Hypalon' waterproofing or equal to balcony	67	m2	17.50	1,173	21.50	1,441	39.00	2,613
14.40 Gypcrete floor topping including steel trowel finish	1,338	m2	7.60	10,169	3.60	4,817	11.20	14,986
SUBTOTAL/FLOORING	23.87	/M2 GFA		17,231		27,096		44,327
15:PAINTING								
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy	26	m2	4.20	109	1.15	30	5.35	139

WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
15.14 Prepare, prime, two coats enamel on metal railing and balustrade	783	m	1.74	1,362	0.80	626	2.54	1,989
15.22 Interior work - Prepare, 1 coat primer sealer, 1 coat latex or semigloss paint on drywall - walls 4962 m2 - ceiling 234 m2 = TOTAL 5196 m2	5,196	m2	2.16	11,223	0.65	3,377	2.81	14,601
15.30 Two coats urethane varnish on doors and frames	105	No	23.50	2,468	5.55	583	29.05	3,050
15.40 Prepare, prime, one coat semigloss on base	2,328	m	0.80	1,862	0.12	279	0.92	2,142
15.50 Prepare, prime, one coat semigloss on shelving	94	m2	2.39	225	0.40	38	2.79	262
SUBTOTAL/PAINTING	11.95	/M2 GFA		17,250		4,933		22,183
16:FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	3.22	345	4.15	444	7.37	789

WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
16.20 Vanity and cabinets, plastic laminated top to lower cabinets, drawers, shelves etc.	195	m	28.00	5,460	180.00	35,100	208.00	40,560
- Lower vanity and cupboard	27	m						
- Wall units	99	m						
- Worktop unit	69	m						
= TOTAL	195	m						
SUBTOTAL/FITTINGS	22.27	/M2 GFA		5,805		35,544		41,349
17:SPECIALTIES								
17.10 Washroom accessories	96	No	5.00	480	7.50	720	12.50	1,200
- 24 No. toilet paper holders								
- 24 No. soap dishes								
- 48 No. towel bars								
= 96 No. TOTAL								
17.20 Medicine cabinet	24	No	10.00	240	34.00	816	44.00	1,056
17.30 25 mm dia. shower curtain rod, chrome	24	No	5.00	120	6.00	144	11.00	264
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts	1	set	56.00	56	360.00	360	416.00	416
17.50 Coat rods, chrome, 18 mm dia.	24	No	3.00	72	5.00	120	8.00	192
17.60 Drapery tracks	102	m	3.25	332	8.25	842	11.50	1,173

WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
17.70 970 mm high metal railing c/w balusters 100 mm o.c. max to balconies	98	m	11.00	1,078	41.00	4,018	52.00	5,096
17.80 Metal railing and balusters with vinyl cap	66	m	11.00	726	36.00	2,376	47.00	3,102
17.90 Handrail: 50 mm dia. pipe & brackets	54	m	23.00	1,242	42.00	2,268	65.00	3,510
SUBTOTAL/SPECIALTIES	8.62	/M2 GFA		4,346		11,664		16,009
18:APPLIANCES								
18.10 Range, freestanding, 760 mm (30") top 4 surface elements, oven auto timer	24	No	15.50	372	483.00	11,592	498.50	11,964
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24	No	15.50	372	458.00	10,992	473.50	11,364
18.30 Range hood	24	No	15.50	372	89.00	2,136	104.50	2,508
18.40 Coin operated dryer	2	No	15.50	31	569.00	1,138	584.50	1,169
18.50 Coin operated washer	2	No	15.50	31	737.00	1,474	752.50	1,505
SUBTOTAL/APPLIANCES	15.35	/M2 GFA		1,178		27,332		28,510

WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
19:PLUMBING								
19.10 Complete plumbing, including:	24	apt	669.00	16,056	1,560.00	37,440	2,229.00	53,496
- 24 No. water closets								
- 32 No. lavatory basins								
- 24 No. baths, 5'								
- 1 No. mop service basin								
- 1 No. laundry tub								
(the above Crane or equal)								
- 24 No. kitchen sinks, compartment, stainless steel								
- 1 No. water heater and storage tank, cap. 300 MBH								
- 1 No. domestic hot water recirculating pump and accessories								
- rough-in, waste and vent								
- roof drains								
SUBTOTAL/PLUMBING	28.81	/M2 GFA		16,056		37,440		53,496
20:HEATING								
20.10 Hot water circulation system (268 m total length) with radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24	apt	392.00	9,408	799.00	19,176	1,191.00	28,584
SUBTOTAL/HEATING	15.39	/M2 GFA		9,408		19,176		28,584

WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
21:VENTILATION								
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans	24	apt	84.00	2,016	243.00	5,832	327.00	7,848
SUBTOTAL/VENTILATION	4.23	/M2 GFA		2,016		5,832		7,848
22:FIRE PROTECTION								
22.10 Fire protection system, complete for 24-unit apartment building	24	apt	28.00	672	53.00	1,272	81.00	1,944
SUBTOTAL/FIRE PROTECTION	1.05	/M2 GFA		672		1,272		1,944
23:ELECTRICAL								
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and power outlets for TV, phone and razor; vent fan, door- bell with two presses, 100 A service board and fire alarm system (includes \$200 per apartment for electrical fixtures)	24	apt	787.00	18,888	934.00	22,416	1,721.00	41,304
SUBTOTAL/ELECTRICAL	22.24	/M2 GFA		18,888		22,416		41,304

WALK - UP APARTMENT

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
24:SITE OVERHEADS								
24.10 Site overheads	24	apt	1,335.00	32,040	665.00	15,960	2,000.00	48,000
- setup								
- supervision								
- plant								
- site office								
- small tools								
- security								
- boarding, etc.								
SUBTOTAL/SITE OVERHEADS	25.85	/M2 GFA		32,040		15,960		48,000
25:GENERAL CONTRACTOR'S OVERHEADS & PROFIT								
25.10 General Contractor's Overhead & Profit	24	apt	665.00	15,960	335.00	8,040	1,000.00	24,000
- permits								
- bonds								
- insurance								
- office overhead								
- profit								
SUBTOTAL/GENERAL CONTRACTOR'S OVHD & PROFIT	12.92	/M2 GFA		15,960		8,040		24,000
TOTAL / MEDICINE HAT	\$352.91	/M2 GFA		\$246,926		\$408,422		\$ 655,347

DETAILED COST ESTIMATES FOR LLOYDMINSTER

WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
1:EXCAVATION								
1.10 Excavate for basement, wall footings and bases	891	m3	0.42	374	1.50	1,337	1.92	1,711
1.20 Backfill to basement walls, footings and bases	188	m3	0.38	71	1.35	254	1.73	325
1.30 150 mm gravel or sand bed under slab on grade	70	m3	3.00	210	10.00	700	13.00	910
1.40 Vapour barrier .152 mm polyethylene on gravel or sand bed	501	m2	0.82	411	0.23	115	1.05	526
SUBTOTAL/EXCAVATION	1.87	/M2 GFA		1,066		2,406		3,472
2:CONCRETE								
2.10 Concrete (25 MPa) in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced conc. footing	58	m3	0.00	0	110.64	6,417	110.64	6,417
2.20 Reinforcing steel in footings and basement walls (material only)	1,652	kg	0.00	0	0.63	1,041	0.63	1,041
2.30 Form, place rebar and pour concrete in footing (560 x 250 mm)(subcontract)	222	m	5.50	1,221	2.44	542	7.94	1,763

WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
2.35 Form, place rebar and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	15.84	1,521	7.62	732	23.46	2,252
2.40 90 mm concrete (20 MPa) in slab on grade	456	m2	3.63	1,655	8.86	4,040	12.49	5,695
2.45 150 x 150 mm welded wire mesh reinforcement to slab on grade (material only)	456	m2	0.00	0	3.01	1,373	3.01	1,373
2.55 38 mm thick rigid insulation to concrete wall (basement)	117	m2	1.95	228	3.55	415	5.50	644
2.60 Parging to concrete walls	29	m2	8.53	247	2.90	84	11.43	331
SUBTOTAL/CONCRETE	10.51	/M2 GFA		4,872		14,643		19,516
3:DAMPROOFING								
3.10 Two coats asphaltic emulsion on concrete walls	159	m2	0.28	45	0.28	45	0.56	89
3.20 100 mm perforated plastic weeping tile in crushed gravel surround	96	m	3.25	312	4.25	408	7.50	720
SUBTOTAL/DAMPROOFING	0.44	/M2 GFA		357		453		809
4:SIDING								
4.10 Prefinished aluminum siding	98	m2	6.16	604	13.25	1,299	19.41	1,902

WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
4.40 Stained dark-brown cedar siding 25 x 150 mm channel to column	700	FBM	0.70	490	1.00	700	1.70	1,190
4.50 Stucco on wire mesh on building paper	678	m2	13.00	8,814	6.46	4,380	19.46	13,194
4.60 24 ga. aluminum vented metal soffit c/w edge moulding	59	m2	5.67	335	11.69	690	17.36	1,024
SUBTOTAL/SIDING	9.32	/M2 GFA		10,242		7,068		17,310
5:ROOFING/SHEET METAL								
5.10 Built-up asphalt roofing completed with mineral granular and flashing	527	m2	20.00	10,540	19.50	10,277	39.50	20,817
5.30 R.S.I. 6 (R34) batt insulation in joist space	527	m2	1.54	812	7.06	3,721	8.60	4,532
5.40 .102 mm polyethylene vapour barrier	580	m2	0.25	145	0.14	81	0.39	226
SUBTOTAL/ROOFING/SHEET METAL	13.77	/M2 GFA		11,497		14,078		25,575
6:CARPENTRY - ROUGH								
6.10 Material only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (2-38 x 235 mm) - spruce	38	MFBM	0.00	0	607.00	23,066	607.00	23,066

WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
6.20 Material only	44	MFBM	0.00	0	452.00	19,888	452.00	19,888
No. 2 grade fir or spruce as below								
framing (38 x 140 mm) - fir								
plate (38 x 140 mm) - fir								
cross bridging (38 x 38 mm) - spruce								
framing (38 x 89 mm) - spruce								
framing (38 x 140 mm) - spruce								
blocking (38 x 89 mm) - spruce								
blocking (38 x 140 mm) - spruce								
wall strapping (38 x 38 mm) - spruce								
fascia (19 x 140 mm) - spruce								
6.30 Material only - Sheathing	4,051	m2	0.00	0	6.50	26,332	6.50	26,332
19 mm plywood - floor underlay	1432	m2						
13 mm tentest - u/s of joist	1368	m2						
10 mm plywood - roof sheathing	524	m2						
8 mm plywood - wall sheathing	727	m2						
6.40 Labour only - complete framing including installation of windows	1,857	m2	23.79	44,178	0.00	0	23.79	44,178
6.50 90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves)	99	m	0.40	40	0.57	56	0.97	96
SUBTOTAL/CARPENTRY - ROUGH	61.15	/M2 GFA		44,218		69,342		113,560

LLOYDMINSTER

		LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
QUANTITY	UNIT	UNIT	RATE	ITEM	COST	UNIT	RATE
							COST

8.20 Double-glazed sealed window in steel frame, with wired glass (size 2.4 x 2.55 m)	4	No	0.00	0	831.00	3,324	831.00	3,324
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WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
8.30 Double-glazed sliding units in wood frame (size 2.4 x .9 m), aluminum sliders, screen, incl. hardware	6	No	0.00	0	231.00	1,386	231.00	1,386
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m), aluminum sliders, screen, incl. hardware	28	No	0.00	0	156.00	4,368	156.00	4,368
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m), aluminum sliders, screen, incl. hardware	3	No	0.00	0	127.00	381	127.00	381
SUBTOTAL/WINDOWS AND GLAZING	13.52	/M2 GFA		0		25,101		25,101
9:SEALANTS	.							
9.10 Caulk - exterior (exterior doors, windows, junction of siding and concrete)	725	m	0.37	268	0.24	174	0.61	442
9.20 Caulk - interior (ceramic tile)	227	m	1.03	234	0.54	123	1.57	356
SUBTOTAL/SEALANTS	0.43	/M2 GFA		502		297		799
10:DOORS								
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold	3	No	245.00	735	1,569.00	4,707	1,814.00	5,442

WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
10.06 Fire Rated door and side light with 0.9 x 0.21 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8	No	190.00	1,520	1,159.00	9,272	1,349.00	10,792
10.09 Solid core door and frame, rotary cut mahogany - 25 No. .9x2.1m x 44mm (20 min label) - 26 No. .85 x 2.1 m x 44 mm = 51 No. TOTAL	51	No	22.00	1,122	183.00	9,333	205.00	10,455
10.20 Hollow core door and frame rotary cut mahogany face - 24 No. .7 x 2. m x 35 mm - 24 No. .75 x 2. m x 35 mm = 48 No. TOTAL	48	No	12.00	576	38.99	1,872	50.99	2,448
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1	No.	22.00	22	213.00	213	235.00	235

WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
10.30 Metal Folding Bi-fold doors, with tracks and pulls	78	No.	12.00	936	122.00	9,516	134.00	10,452
- 28 No. 1.8 x 2. m								
- 14 No. 1.5 x 2. m								
- 6 No. 1.2 x 2. m								
- 14 No. .9 x 2. m								
- 16 No. .6 x 2. m								
= 78 No. TOTAL								
SUBTOTAL/DOORS	21.45	/M2 GFA		4,911		34,913		39,824
11:HARDWARE								
11.15 Lock sets to interior doors	25	set	11.00	275	22.99	575	33.99	850
11.25 Butts to interior doors (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets	81	set	7.73	626	9.99	809	17.72	1,435
11.40 Bathroom privacy latch sets	24	set	7.73	186	11.99	288	19.72	473
11.50 Door closers (rated)	11	No	13.00	143	27.00	297	40.00	440
SUBTOTAL/HARDWARE	1.72	/M2 GFA		1,230		1,969		3,198
12:CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm, thinset on drywall	137	m2	29.00	3,973	23.00	3,151	52.00	7,124
SUBTOTAL/CERAMIC TILING	3.84	/M2 GFA		3,973		3,151		7,124

WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
13:WALLBOARD								
13.10 Gypsum wallboard, taped and sanded 13 mm standard on walls	3,945	m2	3.35	13,216	1.94	7,653	5.29	20,869
13.13 Gypsum wallboard, taped and sanded 13 mm fire retardant - walls 666 m2 - stair soffit 29 m2 = TOTAL 695 m2	695	m2	3.69	2,565	2.44	1,696	6.13	4,260
13.14 Gypsum wallboard, taped and sanded 15.9 mm thick	487	m2	3.69	1,797	3.00	1,461	6.69	3,258
13.15 Gypsum wallboard, taped and sanded 15.9 fire retardant shaft enclosure	63	m2	5.69	358	3.20	202	8.89	560
13.16 Gypsum wallboard, taped and sanded 15.9 mm fire retardant with sound bar on ceiling	1,887	m2	4.69	8,850	3.40	6,416	8.09	15,266
13.17 2 layers gypsum wallboard, taped and sanded, 15.9 mm fire retardant with sound bar on ceiling	4	m2	7.60	30	7.02	28	14.62	58
13.30 Tentest board, Crane 3-183 Redcliffe	524	m2	4.20	2,201	2.41	1,263	6.61	3,464
13.40 Finish to ceilings - textured	1,425	m2	1.32	1,881	1.11	1,582	2.43	3,463

WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
13.70 Vapour barrier, .102 mm polyethylene	1,346	m2	0.25	337	0.14	188	0.39	525
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls	728	m2	0.77	561	4.30	3,130	5.07	3,691
13.86 Batt insulation RSI - 3.5 (R20) to interior walls	908	m2	0.77	699	4.30	3,904	5.07	4,604
SUBTOTAL/WALLBOARD	32.32	/M2 GFA		32,494		27,523		60,018
14:FLOORING								
14.10 Sheet vinyl flooring, .065 gauge with adhesive to subfloor	364	m2	5.75	2,093	10.75	3,913	16.50	6,006
14.20 Carpet, 20 oz. 100% Nylon 13 mm thick chip foam underlay	1,296	m2	3.25	4,212	13.39	17,353	16.64	21,565
14.30 'Neoprene Hypalon' waterproofing or equal to balcony	67	m2	18.00	1,206	22.50	1,508	40.50	2,714
14.40 Gypcrete floor topping including steel trowel finish	1,338	m2	7.50	10,035	3.80	5,084	11.30	15,119
SUBTOTAL/FLOORING	24.45	/M2 GFA		17,546		27,858		45,404
15:PAINTING								
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy	26	m2	4.25	111	1.18	31	5.43	141

WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
15.14 Prepare, prime, two coats enamel on metal railing and balustrade	783	m	1.48	1,159	0.89	697	2.37	1,856
15.22 Interior work - Prepare, 1 coat primer sealer, 1 coat latex or semigloss paint on drywall - walls 4962 m2 - ceiling 234 m2 = TOTAL 5196 m2	5,196	m2	2.16	11,223	0.66	3,429	2.82	14,653
15.30 Two coats urethane varnish on doors and frames	105	No	24.90	2,615	5.60	588	30.50	3,203
15.40 Prepare, prime, one coat semigloss on base	2,328	m	0.69	1,606	0.14	326	0.83	1,932
15.50 Prepare, prime, one coat semigloss on shelving	94	m2	2.27	213	0.43	40	2.70	254
SUBTOTAL/PAINTING	11.87	/M2 GFA		16,927		5,111		22,038
16:FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	3.24	347	4.22	452	7.46	798

WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
16.20 Vanity and cabinets, plastic laminated top to lower cabinets, drawers, shelves etc.	195	m	30.00	5,850	185.00	36,075	215.00	41,925
- Lower vanity and cupboard	27	m						
- Wall units	99	m						
- Worktop unit	69	m						
= TOTAL	195	m						
SUBTOTAL/FITTINGS	23.01	/M2 GFA		6,197		36,527		42,723
17:SPECIALTIES								
17.10 Washroom accessories	96	No	5.50	528	8.00	768	13.50	1,296
- 24 No. toilet paper holders								
- 24 No. soap dishes								
- 48 No. towel bars								
= 96 No. TOTAL								
17.20 Medicine cabinet	24	No	11.00	264	35.00	840	46.00	1,104
17.30 25 mm dia. shower curtain rod, chrome	24	No	6.00	144	7.00	168	13.00	312
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts	1	set	58.00	58	365.00	365	423.00	423
17.50 Coat rods, chrome, 18 mm dia.	24	No	3.00	72	5.00	120	8.00	192
17.60 Drapery tracks	102	m	3.50	357	8.50	867	12.00	1,224

WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	QUANTITY	UNIT	LABOUR UNIT RATE	LABOUR ITEM COST	MAT/EQUIP UNIT RATE	MAT/EQUIP ITEM COST	TOTAL UNIT RATE	TOTAL COST
17.70 970 mm high metal railing c/w balusters 100 mm o.c. max to balconies	98	m	11.00	1,078	42.00	4,116	53.00	5,194
17.80 Metal railing and balusters with vinyl cap	66	m	11.00	726	37.00	2,442	48.00	3,168
17.90 Handrail: 50 mm dia. pipe & brackets	54	m	24.00	1,296	43.00	2,322	67.00	3,618
SUBTOTAL/SPECIALTIES	8.90	/M2 GFA		4,523		12,008		16,531
18:APPLIANCES								
18.10 Range, freestanding, 760 mm (30") top 4 surface elements, oven auto timer	24	No	16.00	384	483.00	11,592	499.00	11,976
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24	No	16.00	384	458.00	10,992	474.00	11,376
18.30 Range hood	24	No	16.00	384	99.00	2,376	115.00	2,760
18.40 Coin operated dryer	2	No	16.00	32	575.00	1,150	591.00	1,182
18.50 Coin operated washer	2	No	16.00	32	745.00	1,490	761.00	1,522
SUBTOTAL/APPLIANCES	15.52	/M2 GFA		1,216		27,600		28,816

WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
19:PLUMBING								
19.10 Complete plumbing, including:	24	apt	719.00	17,256	1,600.00	38,400	2,319.00	55,656
- 24 No. water closets								
- 32 No. lavatory basins								
- 24 No. baths, 5'								
- 1 No. mop service basin								
- 1 No. laundry tub								
(the above Crane or equal)								
- 24 No. kitchen sinks, compartment, stainless steel								
- 1 No. water heater and storage tank, cap. 300 MBH								
- 1 No. domestic hot water recircula- ting pump and accessories								
- rough-in, waste and vent								
- roof drains								
SUBTOTAL/PLUMBING	29.97	/M2 GFA		17,256		38,400		55,656
20:HEATING								
20.10 Hot water circulation system (268 m total length) with radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24	apt	511.00	12,264	1,085.00	26,040	1,596.00	38,304
SUBTOTAL/HEATING	20.63	/M2 GFA		12,264		26,040		38,304

WALK - UP APARTMENT

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

			LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL
	QUANTITY	UNIT	UNIT RATE	ITEM COST	UNIT RATE	ITEM COST	UNIT RATE	COST
21:VENTILATION								
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans	24	apt	90.00	2,160	265.00	6,360	355.00	8,520
SUBTOTAL/VENTILATION	4.59	/M2 GFA		2,160		6,360		8,520
22:FIRE PROTECTION								
22.10 Fire protection system, complete for 24-unit apartment building	24	apt	35.00	840	68.00	1,632	103.00	2,472
SUBTOTAL/FIRE PROTECTION	1.33	/M2 GFA		840		1,632		2,472
23:ELECTRICAL								
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and power outlets for TV, phone and razor; vent fan, door- bell with two presses, 100 A service board and fire alarm system (includes \$200 per apartment for electrical fixtures)	24	apt	1,114.00	26,736	1,310.00	31,440	2,424.00	58,176
SUBTOTAL/ELECTRICAL	31.33	/M2 GFA		26,736		31,440		58,176

WALK - UP APARTMENT

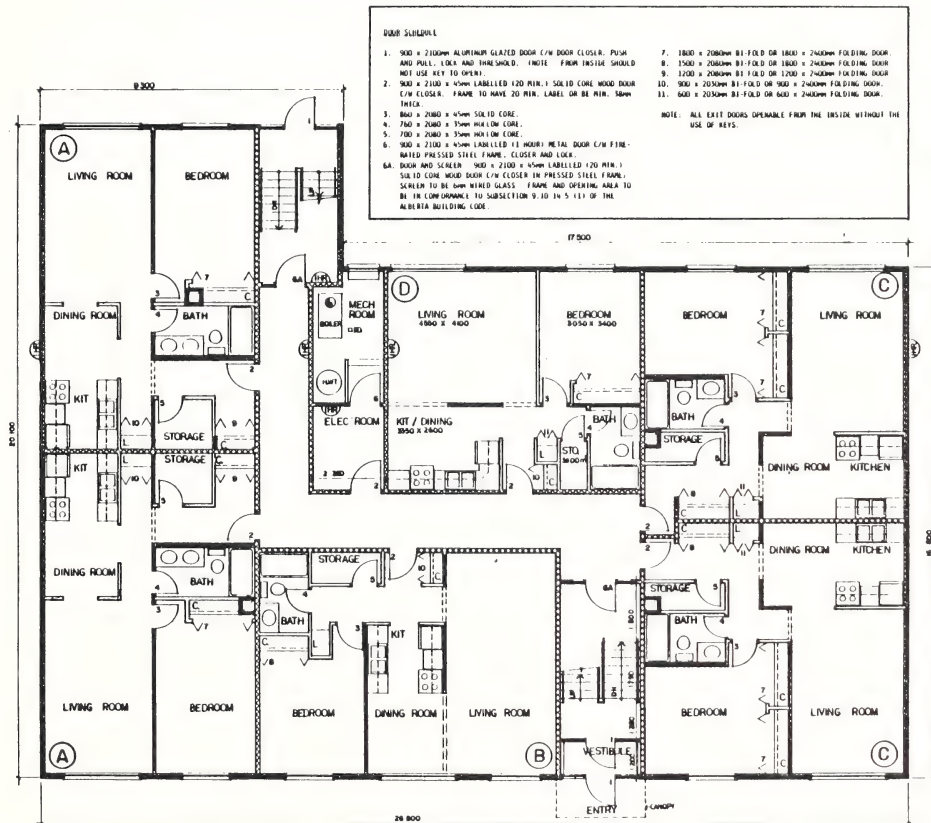
LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

				LABOUR	LABOUR	MAT/EQUIP	MAT/EQUIP	TOTAL	TOTAL									
	QUANTITY	UNIT	UNIT	RATE	ITEM	COST	UNIT	RATE	ITEM	COST	UNIT	RATE	ITEM	COST	UNIT	RATE	ITEM	COST
24:SITE OVERHEADS																		
24.10 Site overheads	24	apt		1,335.00		32,040		665.00		15,960		2,000.00		48,000				
- setup																		
- supervision																		
- plant																		
- site office																		
- small tools																		
- security																		
- boarding, etc.																		
SUBTOTAL/SITE OVERHEADS	25.85	/M2	GFA			32,040				15,960				48,000				
25:GENERAL CONTRACTOR'S OVERHEADS & PROFIT																		
25.10 General Contractor's Overhead & Profit	24	apt		665.00		15,960		335.00		8,040		1,000.00		24,000				
- permits																		
- bonds																		
- insurance																		
- office overhead																		
- profit																		
SUBTOTAL/GENERAL CONTRACTOR'S OVHD & PROFIT	12.92	/M2	GFA			15,960				8,040				24,000				
TOTAL / LLOYD MINSTER																		
	\$384.78	/M2	GFA			\$272,592				\$441,944				\$ 714,537				

APPENDIX

Reduced Drawings: Walk-Up Apartment



WALL LISTING

- EXTERIOR STUD WALL C/W 18 x 18mm SHAPING TO FOUNDATION WALL. SIDING ON STUDS. BUILDING PAPER, 50 x 80mm STUDS @ 400mm O.C., RSI 3.5 MINERAL WOOL INSULATION, VAPOR BARRIER, 12.7mm GYPSUM BOARD.
- EXTERIOR STUD WALL 1 HOUR FIRE RESISTANCE RATING, C/W 18 x 18mm SHAPING TO FOUNDATION WALL. NON-COMBUSTIBLE SIDING ON STUDS. BUILDING PAPER, 50 x 80mm STUDS @ 400mm O.C., RSI 3.5 MINERAL WOOL INSULATION WITH DENSITY OF 120 kg/m³, VAPOR BARRIER, 15.9mm TYPE X GYPSUM BOARD.
- EXTERIOR STUD WALL, SIDING ON STUDS. BUILDING PAPER, 50 x 80mm STUDS @ 400mm O.C., RSI 2.1 MINERAL WOOL INSULATION, VAPOR BARRIER, 12.7mm GYPSUM BOARD.
- EXTERIOR STUD WALL, 1 HOUR FIRE RESISTANCE RATING, NON-COMBUSTIBLE SIDING ON STUDS. BUILDING PAPER, 50 x 80mm STUDS @ 400mm O.C., RSI 2.1 MINERAL WOOL INSULATION WITH DENSITY OF 120 kg/m³, VAPOR BARRIER, 15.9mm TYPE X GYPSUM BOARD.
- INTERIOR WALL 15/4 HOUR FIRE SEPARATION: 2 ROWS OF 50 x 80mm STUDS, EACH SET 400mm O.C. STAGGERED ON LUMBER 50 x 100mm PLATE. MINERAL FIBRE WITH A MASS OF AT LEAST 12 kg/m² ON EACH SIDE, 12.7mm GYPSUM BOARD, BOTH SIDES.
- INTERIOR WALL 12.7mm GYPSUM BOARD BOTH SIDES OF 50 x 100mm STUDS.
- INTERIOR WALL 15/4 HOUR FIRE SEPARATION: 2 ROWS OF 50 x 80mm STUDS, EACH SET 400mm O.C. STAGGERED ON LUMBER 50 x 100mm PLATE. MINERAL FIBRE ON EACH SIDE, 15.9mm TYPE X GYPSUM BOARD, BOTH SIDES.
- INTERIOR WALL 11 HOUR FIRE SEPARATION: 2 ROWS OF 50 x 80mm STUDS, EACH SET 400mm O.C. STAGGERED ON LUMBER 50 x 100mm PLATE. MINERAL FIBRE ON EACH SIDE, 15.9mm TYPE X GYPSUM BOARD, BOTH SIDES.
- INTERIOR WALL 11 HOUR FIRE SEPARATION: 50 x 100mm STUDS @ 400mm O.C. AND 15.9mm TYPE X GYPSUM BOARD BOTH SIDES.
- INTERIOR WALL 50 x 80mm STUDS @ 400mm O.C. AND 12.7mm GYPSUM BOARD, BOTH SIDES.
- DROP CEILING
- BOULS
 - DOUBLE STUDS UNDER ALL BEARING POINTS AND ALL OPENINGS.
 - 100mm x 25mm BUILT-UP LINTEL, MORE PORTANTLY ABOVE ALL OPENINGS.
 - BALLAST CONCRETE-REINFORCED JOISTS SHALL EXTEND INTO BUILDING MINIMUM 2400mm.
- SHIRT ENCLOSURE 5/4 HOUR FIRE RESISTANCE RATING AND SICI OF 45, 15.9mm TYPE X GYPSUM BOARD, 57mm x 50mm INTER GALVANIZED STEEL 1-STUDS @ 400mm O.C. AND 7 FRAMES TOP AND BOTTOM. RESIST-FIRE FLOORING CHANNELS @ 400mm O.C. MINERAL WOOL INSULATION WITH DENSITY OF 120 kg/m³, 19mm GYPSUM BOARD.

ALBERTA HOUSE COST COMPARISON STUDY

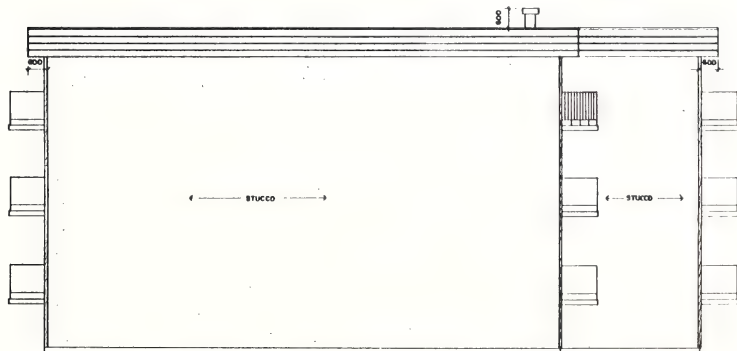
BASEMENT FLOOR PLAN

SCALE 1" = 8'





FRONT ELEVATION



RIGHT ELEVATION

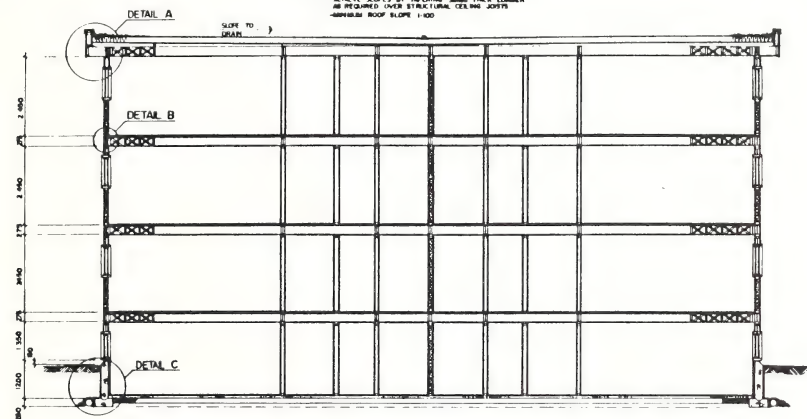
ALBERTA HOUSE COST COMPARISON STUDY

ELEVATIONS

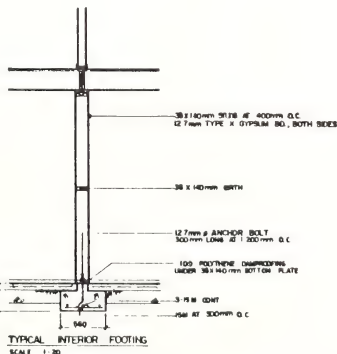
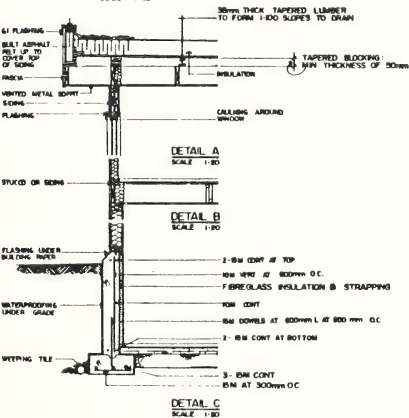
SCALE 1" = 80'



NOTE - SEE SITE PLAN FOR ROOF SLOPE CONFIGURATION
- REINFORCE SLOPES BY TAPERING 30mm THICK LUMBER
AS REQUIRED UNDER STRUCTURAL CEILING JOISTS
- MINIMUM ROOF SLOPE 1:100



SECTION
SCALE 1:50



TYPICAL INTERIOR FOOTING
SCALE 1:30

ROOF CONSTRUCTION - 4 HOUR FIRE RESISTANCE RATING:

- ROOFING: GRAVEL
- BUILT UP ROOFING: 150mm RIGID FIBREGLASS INSULATION & VAPOR BARRIER
- 150mm PLANKING: SHEATHING - ALL ENDS SUPPORTED WITH MIN. 50 x 150mm WOOD BLOCKING
- 50 x 275mm NO. 3 SPRUCE JOISTS AT 900mm O.C.
- 50 x 150mm CROSS BRACING

- 15.0mm TYPE X GYPSUM BOARD

EXTERIOR WALL CONSTRUCTION

TYPE A - NO FIRE RESISTANCE RATING:

- SIDING ON STUDS
- BUILDING PAPER
- 150 x 275mm NO. 3 MINERAL WOOL INSULATION AND VAPOR BARRIER
- 50 x 80mm WOOD STUDS @ 900mm O.C. (50 x 150mm WOOD STUDS @ 900mm O.C. FOR BASEMENT)
- 12.7mm GYPSUM BOARD

TYPE B - 1 HOUR FIRE RESISTANCE RATING:

- SAME AS TYPE A EXCEPT MINERAL WOOL INSULATION TO HAVE DENSITY OF 170kg/m³, 15.0mm TYPE X GYPSUM BOARD AND STUDS OR NON-COMBUSTIBLE SIDING

FLOOR CONSTRUCTION

- 5/8" HOUR FIRE SEPARATION AND 5.1 C. RATING OF 1/5
- FLOOR FINISH
- 80mm PLANK UNDERLAY
- 150mm T & G LUMBER OR 15.0mm PLANK ON WAFERBOARD COVERED WITH MINERAL FIBRE BETWEEN JOISTS SPACED 900mm O.C.
- 50 x 275mm NO. 3 SPRUCE JOISTS AT 900mm O.C.
- 50 x 150mm CROSS BRACING AT 2.4m O.C. MAX.
- RESISTENT CHANNELS
- 15.0mm TYPE X GYPSUM BOARD TYPICALLY EXCEPT FOR MECHANICAL ROOM CEILING - APPLY 2 LAYERS OF 15.0mm TYPE X GYPSUM BOARD

CORRIDOR AND RESTROOM WALL CONSTRUCTION

- 5/8" HOUR FIRE SEPARATION AND 5.1 C. RATING OF 1/5
- 150 x 150mm NO. 3 WOOD STUDS, 15.0mm TYPE X GYPSUM BOARD ON 150 x 150mm PLATE MINERAL FIBRE WITH A PASS OF AT LEAST 1.2kg/m² ON EACH SIDE
- 12.7mm GYPSUM BOARD BOTH SIDES

BEARING WALL CONSTRUCTION

- 5/8" HOUR FIRE RESISTANCE RATING
- 50 x 150mm NO. 3 WOOD STUDS, 15.0mm TYPE X GYPSUM BOARD ON 150 x 150mm PLATE MINERAL FIBRE WITH A PASS OF AT LEAST 1.2kg/m² ON EACH SIDE
- 12.7mm TYPE X GYPSUM WALLBOARD, BOTH SIDES

NOTES

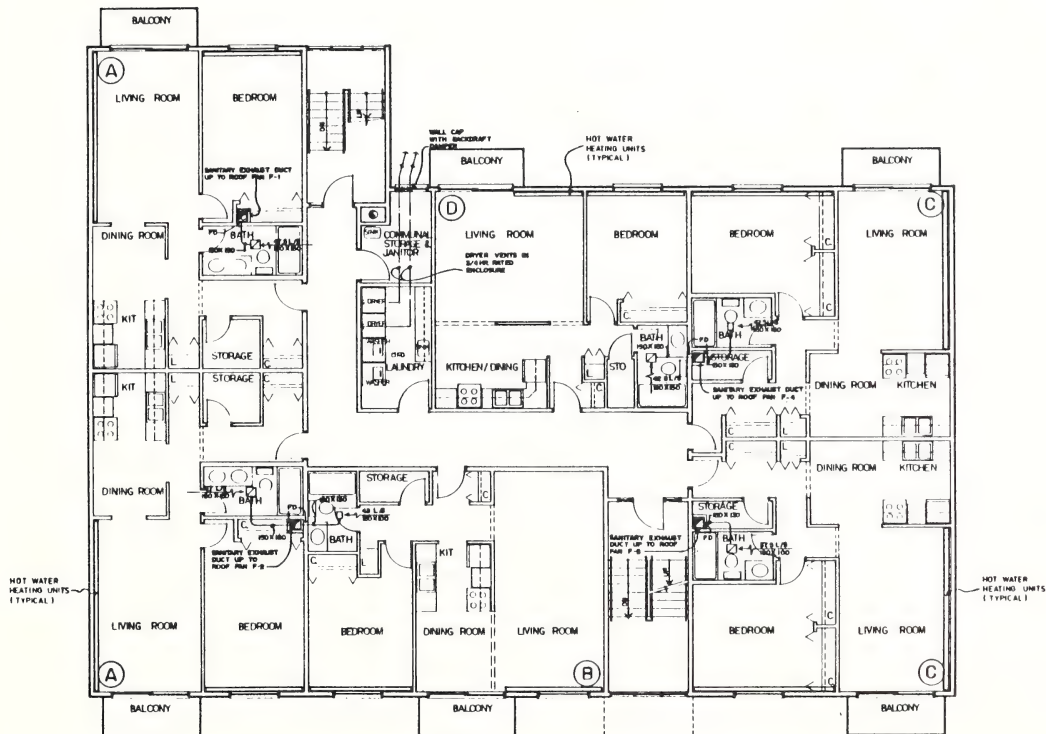
1. PROVIDE GALVANIZED STEEL, GA. 45.7mm AT THE HEAD OF ALL EXTERIOR OPENINGS
2. WEAPING TELES SHALL BE LAID ON UNITS FORGED OR WELL COMPACTED SOIL, SO THAT THE TOP OF THE WEAPING TELES IS WITHIN THE UNDERPIN OF THE FLOOR SLAB

NOTE - SEE SITE PLAN FOR ROOF SLOPE CONFIGURATION
- REINFORCE SLOPES BY TAPERING 30mm THICK LUMBER
AS REQUIRED UNDER STRUCTURAL CEILING JOISTS
- MINIMUM ROOF SLOPE 1:100

ALBERTA HOUSE COST COMPARISON STUDY

SECTION & DETAILS

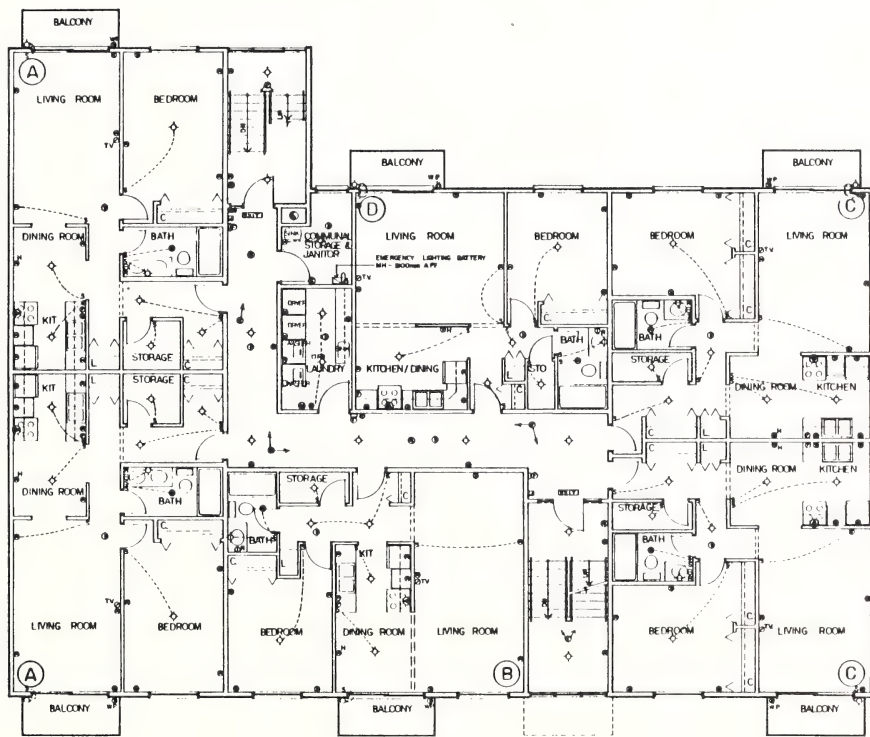
SCALE: 1/8" = 1'-0"



ALBERTA HOUSE COST COMPARISON STUDY

MAIN FLOOR PLAN
MECHANICAL LAYOUT
SCALE: 1" = 10'

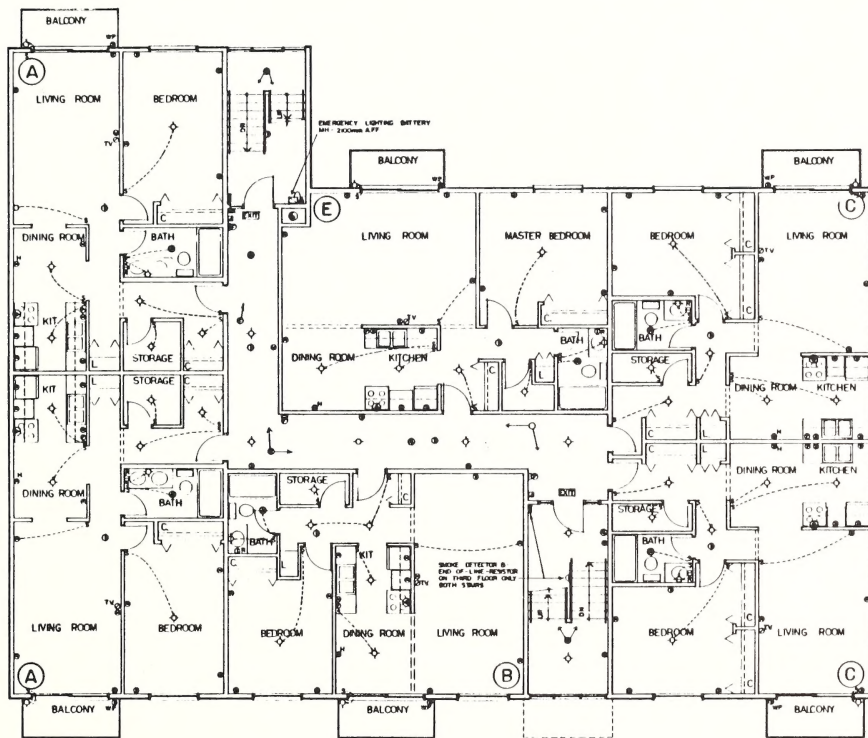




ALBERTA HOUSE COST COMPARISON STUDY

MAIN FLOOR PLAN
ELECTRICAL LAYOUT
SCALE 1/8"





ALBERTA HOUSE COST COMPARISON STUDY

2ND & 3RD FLOOR PLAN
ELECTRICAL LAYOUT



